Massachusetts Burn Injury Reporting System

2006 Annual Report

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Massachusetts Burn Injury Reporting System

2006 Annual Report

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Table of Contents

MAPS

Executive Summary

In 2006, the twenty-first full year of the Massachusetts Burn Injury Reporting System (M-BIRS), 42 acute care hospitals and other health care facilities reported 358 victims of burns. Forty-nine (49) of these 358 victims received care at two Massachusetts hospitals and were reported to the system twice. M-BIRS was established in the Department of Public Safety in 1984 as a tool to help fire service and law enforcement personnel identify arsonists that may have been burned while setting fires. M-BIRS, along with the Office of the State Fire Marshal, was carried over to the Department of Fire Services in 1996. It remains a joint program of the Department of Fire Services and the Massachusetts Department of Public Health. The "Burn Registry" also provides valuable data on the nature of the burn problem in the Commonwealth.

Massachusetts is renowned for its medical institutions and in particular for the advanced treatment available for burn and trauma victims. Many advances in treatment that have lead to increased ability for victims to survive serious burn injuries took place in Massachusetts. Those advances started in the desperate days after the deadly 1942 nightclub fire at Boston's Cocoanut Grove and continue today.

Statutory Authority for M-BIRS in MGL 112, Section 12A
According to Massachusetts General Law (MGL) Chapter 112, Section 12A, the treatment of all burn injuries extending over 5% or more of a person's body surface area must be reported immediately to the State Fire Marshal.

M-BIRS Has Two Main Purposes — Identifying Arsonists and Burn Prevention
Data collected by the Massachusetts Burn Injury Reporting System is used in several ways. Investigators use the data to determine if an arsonist was treated for a burn that resulted from an attempt to illegally burn a building or vehicle. If these burns are not reported promptly, arsonists may continue to light fires that threaten life and property.

Our data has also been used to identify problems that need to be addressed by public education, regulation or development of appropriate intervention strategies. We need to know what type of activity injures whom, if the injuries are seasonal and how old the victims are to develop and implement effective prevention programs. We appreciate the efforts of the many dedicated doctors, nurses and clerical personnel who report the burn injuries promptly and completely. They make the program work.

Painful, disfiguring and expensive burn injuries exact a tremendous toll from their victims, their families and society. The statistics in this report illustrate the need for more burn prevention education and indicate to whom specific safety messages should be targeted.

State Fire Marshal Stephen D. Coan invites health and medical professionals, classroom and community educators, day care teachers and elder service workers to join with him in making the Commonwealth safer from burn injuries.

DPH Alerts OSHA to Severe Burn Injuries in the Workplace
DPH notifies one of the three OSHA area offices about those companies in which an employee was burned as a result of explosions, chemical exposures, electrocutions, or those that appeared to indicate likely violations of OSHA standards. Twelve (12) burn injuries were referred to OSHA in 2006 for cases that met the criteria.

Scalds Caused 37% of Reported Burn Injuries
Scalds have been the leading cause of burn injuries for the past 21 years. In 2006, scalds caused 133, or 37%, of the burn injuries reported to M-BIRS. Spilled hot beverages caused the majority of scald burns. Hot tap water, cooking liquids and grease, and hot food also caused scald burns.

Keep Hot Liquids Away from Babies and Preschoolers
In 2006, young children were the most frequent victims of scald burns. Forty-seven percent (47%) of the 133 scald victims were under five years old, and most were less than one year old. Children under five years of age were seven and a half times more likely to be scalded. Hot beverages posed the greatest risk to young children; parents and caregivers of young children must remember that it is dangerous to drink coffee or tea while holding a baby.

Set Hot Water Heaters at 125° F or Lower
Hot tap water is also a danger to very young children. It takes only one second of exposure to water at 155°F to cause a third degree burn. Hot water heaters should be set to temperatures of 125° F or lower. Massachusetts state law states that the temperature must be set between 110°F and 130°F. Parents should never leave a baby or toddler alone in a bath. Young children like to turn knobs and use levers and they may turn on the hot water when a parent is distracted.

Kitchen is a Dangerous Place
A significant number of the burn injuries occur in the kitchen each year. Flame burns such as sleeves igniting while cooking, scald burns from grease splatters and hot liquids while cooking, many hot coffee and tea spills, contact burns from touching hot stoves, take place in the kitchen. Since we must cook every day, we must learn to do so safely. Children should also be kept in a safe area such as a high chair or playpen while cooking is taking place.

40% of Burns from Fire Are from House Fires
Burn injuries from fires were the second highest cause of burn injuries in 2006 accounting for 24% of the burn injuries. House fires caused 40% of these burns, camp or bon fires caused 23%; and motor vehicle and brush fires each caused 13% of burn injuries caused by fires.

13% of Burns Work-Related
Hospitals reported that 13% of the burn victims were burned while working, down from the 14% reported in 2005. Eighty-nine percent (89%), of the people burned while working were male.

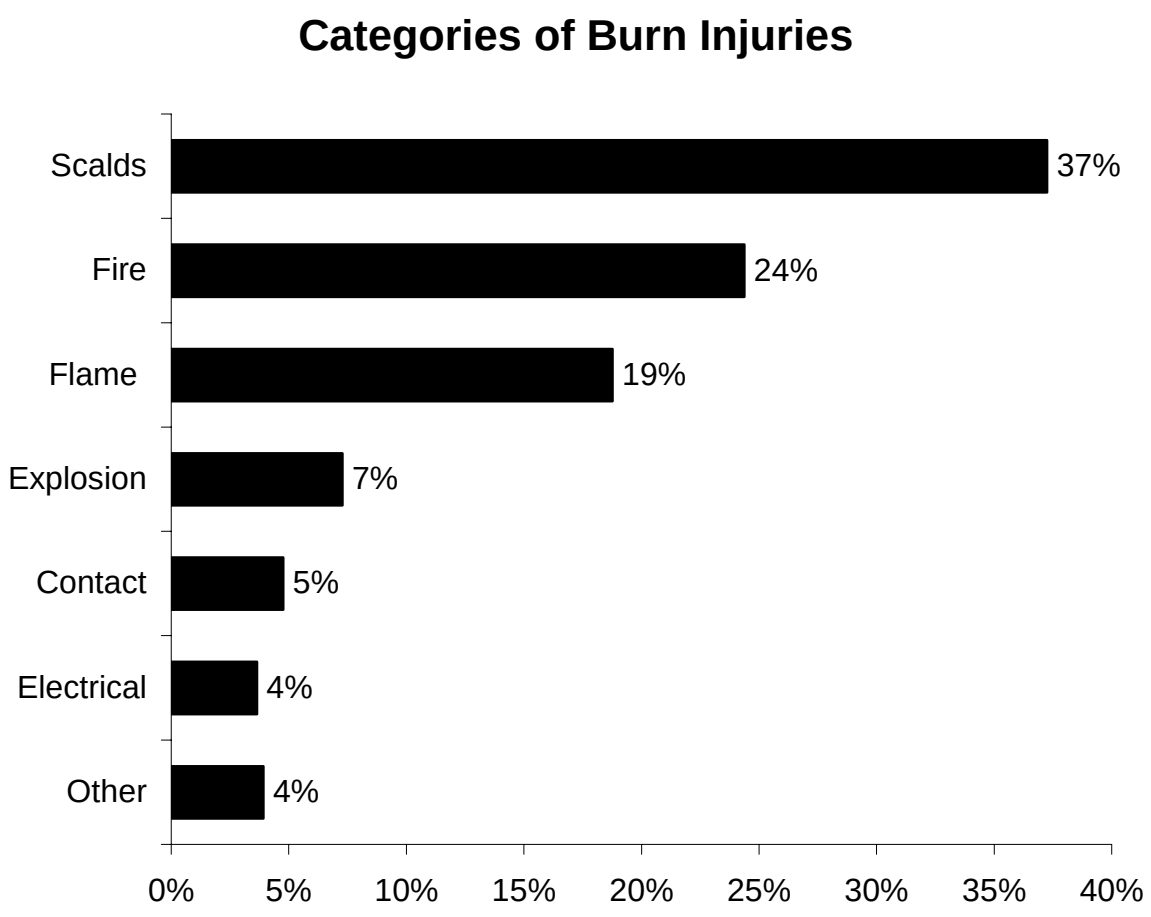
Over 2/3 of Burns Occurred in the Victim's Home
Of the 358 burn injuries reported to M-BIRS in 2006, 242, or 68%, occurred in the victim's home or surrounding yard. Forty-six percent (46%) of these burn injuries were scalds. Three (3), or 1%, of the home-related burn injuries resulted in the victim succumbing to his or her injuries.

Causes of Burn Injuries

In this report, we look at burn injuries in two different ways. In the first section, we look at the type of incident that caused the burn. Was the burn caused by a fire, a flame, a scald or something else? A burn is said to result from a flame when the fire is confined to the victim or the victim's clothing. When a wider area burns, the injury is considered to result from fire.

Over 1/3 of All Burn Victims Never Come Near a Flame
Scalds from hot liquids, cooking grease and steam caused 37% of the 358 burn injuries reported in 2006. Twenty-four percent (24%) were caused by fires. Flames from burning clothing, bedding or similar objects caused 19% of the burns; 7% were caused by explosions, and 5% were caused by contact with hot objects. Electrical incidents such as electrocutions, flashburns[1] and explosions caused 4% of the burns. Four percent (4%) of the reported burns in 2006 had other causes, such as chemical burns or sunburns.

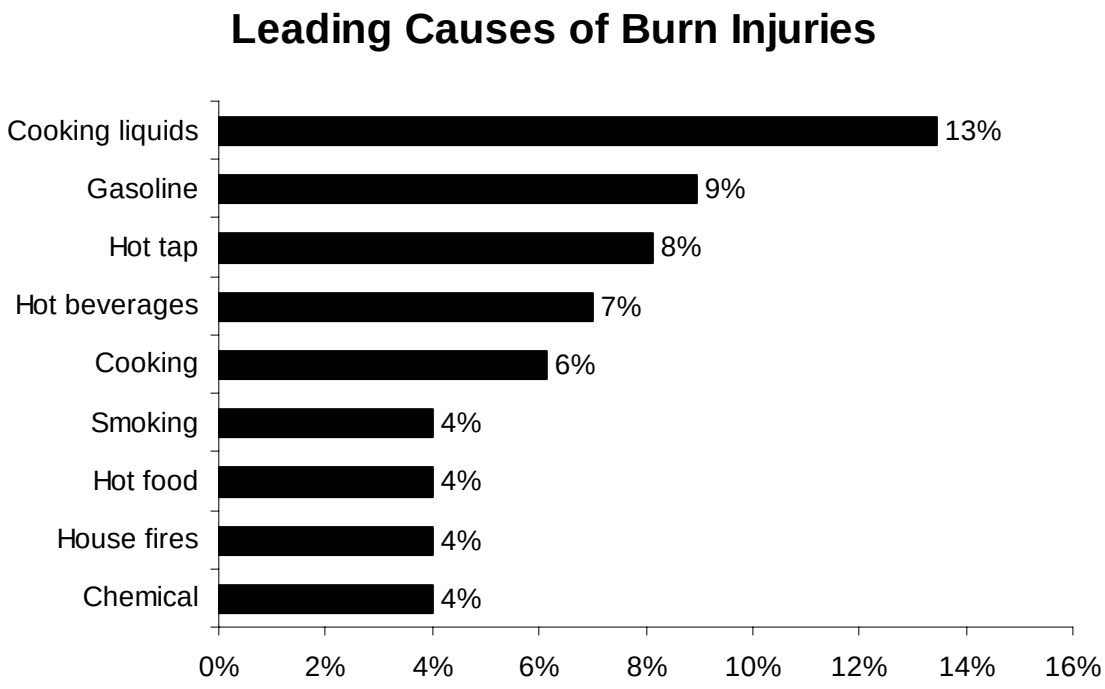
We also look at more specific causes such as hot beverage scalds or incidents involving gasoline.



[1] A flashburn is a burn caused by short-term exposure to super-heated air generally from an explosion; there is no direct contact with flame.

Type of Incidents Causing Burn Injuries

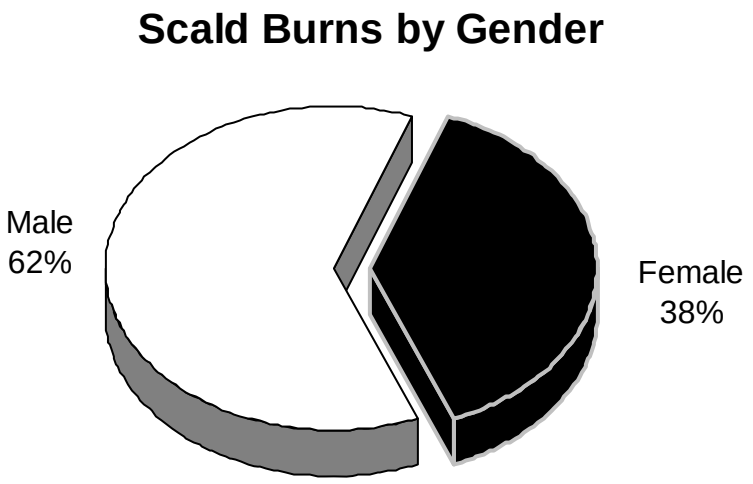
Look at Specific Causes and Equipment to Develop Prevention Strategies
To develop effective burn prevention policies and programs, we must first look at the specific items or behaviors that caused the burns. Thirteen percent (13%) of the 358 burn injuries reported in 2006 were scalds from cooking liquids. Gasoline use by adults was involved in 9% of the burn injuries in 2006. Hot tap water caused 8% of the burn injuries. Seven percent (7%) of the burns were caused by hot beverages. Unspecified cooking acts caused 6% of all 2006 burns. Smoking, hot food, house fires and chemical burns each caused 4% of the burn injuries in Massachusetts in 2006. For more information, please refer to the table *Specific Causes of Burn Injuries* in the Appendix.



Burn Injuries Caused by Scalds

Scalds Caused 37% of All Burns
Scalds have been the leading cause of burn injuries every year since the inception of M-BIRS. Over the past 10 years, scalds have averaged 40% of total burns. The percentage of total burns has declined from a high of 47% in 1998 to a low of 35% in 2005. The 10-year average from 1997 through 2006 is 40%[3] of total annual reported burns.

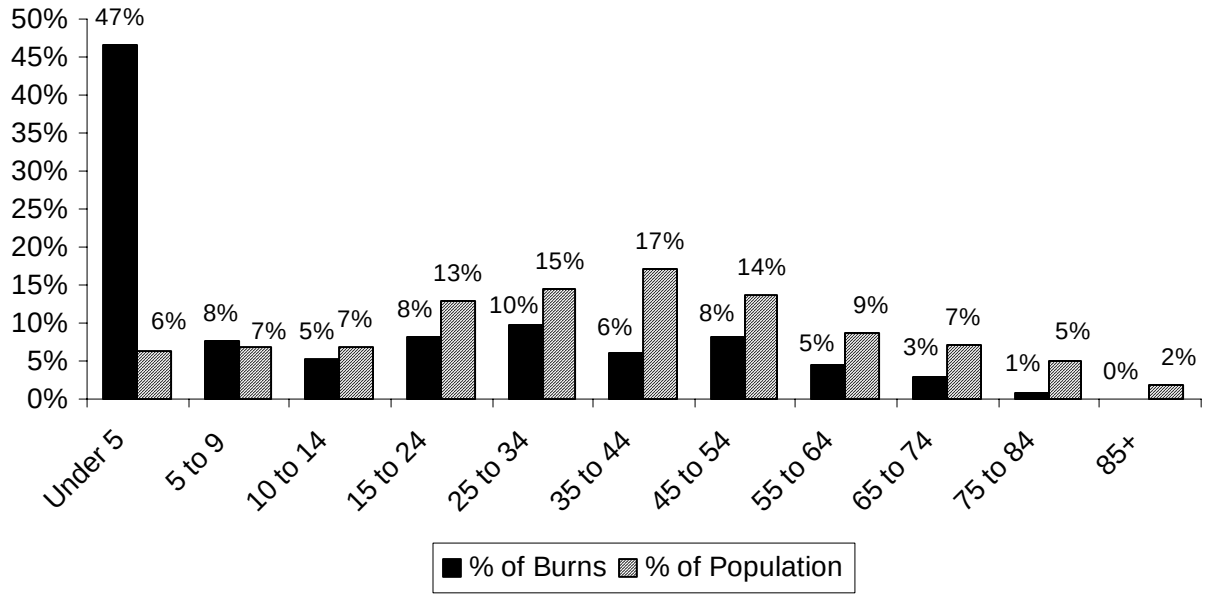
One hundred thirty-three (133), or 37%, of the 358 reported burns were hot scalds. Twelve (12), or 9%, of the 133 scalds occurred while the victim was working. Eighty-two (82), or 62%, of the 133 scald victims were male and 51, or 38%, were female.



Children Under 5 Years Old Were Most at Risk for Scald Burns
Young children were the most frequent victims of scald burns. According to the 2000 U.S. Census, children under the age of five comprised 6% of the Massachusetts population. However that same age group accounted for 47% of all scald burns in 2006. Thirty-six (36), or 27%, were infants one year old or younger. Children aged five to nine accounted for 8%, while children aged 10 to 14 accounted for 5% of these injuries.

[3] In 2003, Scalds represented 36% of all the burns reported to M-BIRS. However if not for The Station nightclub fire victims that were treated in Massachusetts, scalds would have represented 38% which would still be the second lowest in the past 10 years.

Scalds by Age Group



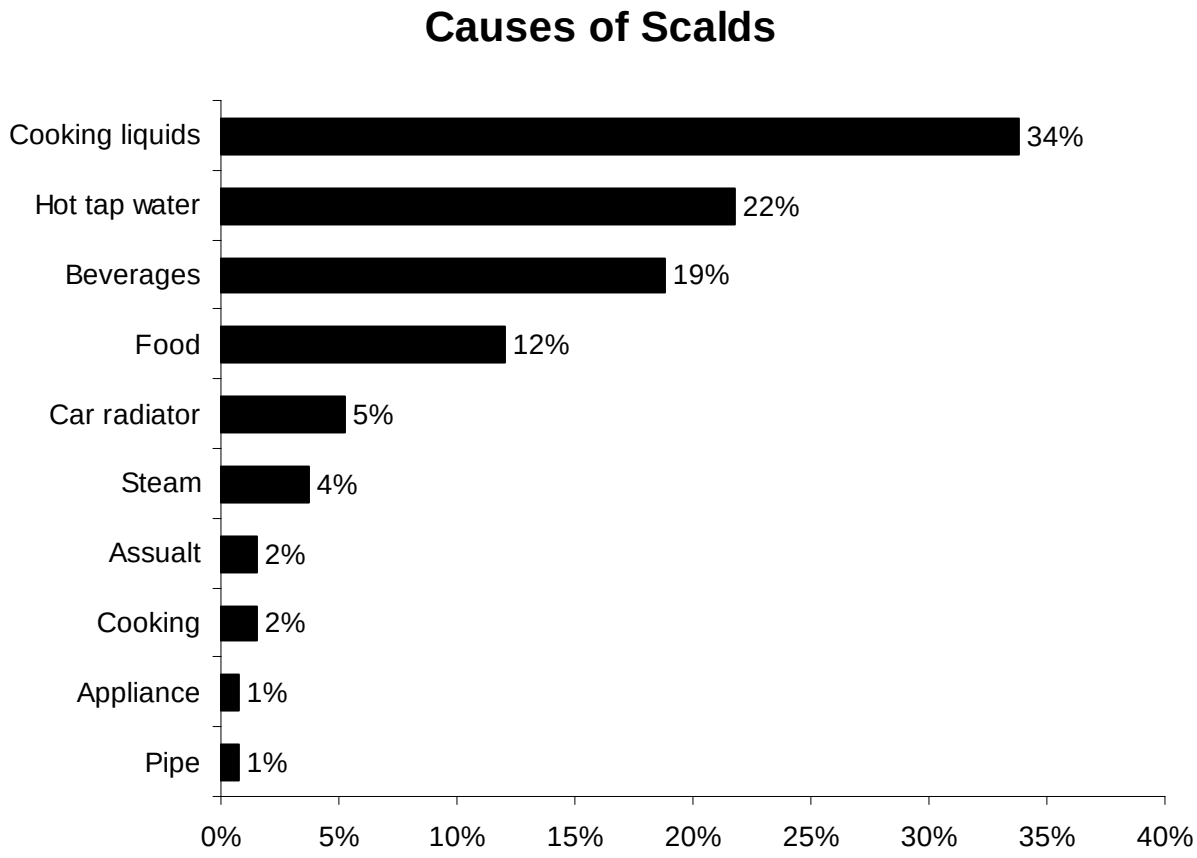
Pre-schoolers 7 1/2 Times More Likely to Suffer Scald Burns

Many adults also suffered burns from scalds. Eight percent (8%) were between 15 and 24 years old; 10% were between 25 and 34; 6% were between 35 and 44 years of age; 8% were between 45 and 54; 5% were between 55 and 64; 3% were between 65 and 74; 1% were between 75 and 84; and no one over the age of 84 was reported to have received a scald burn in 2006. A one-month old girl was the youngest scald burn victim, while the oldest person was an 84-year old man. When the shaded bar of the graph representing the percent of scald burns is higher than the striped bar representing percent of population, higher than expected risk at this type of injury exists. Only pre-schoolers were scalded at a disproportionate rate; they were seven and a half times more likely to suffer a scald burn.

Cooking Liquids Caused Over 1/3 of All Scald Burns

Cooking liquids accounted for 34% of all scald burns. This is only the third year (second in a row) since the beginning of M-BIRS in 1984 that hot beverages was not the leading cause of scald burns[4]. Twenty-two percent (22%) were caused by hot tap water. For the first time ever, scald burns from hot beverages were the third leading cause of scald burns, causing 19%, of the 133 scald burns. Twelve percent (12%) were caused by hot foods. Five percent (5%) were caused by car radiators. Steam caused 4% of these scald burn injuries. Unspecified cooking acts and assaults were each responsible for 2% of these injuries. An appliance, and a hot pipe were each the source in 1% of the reported scald burn injuries in 2006.

[4] In 1999 scald burns from cooking liquids were one percentage point higher than scald burns from hot beverages. In 2005, hot cooking liquids were 10 percentage points higher than scald burns from hot beverages.



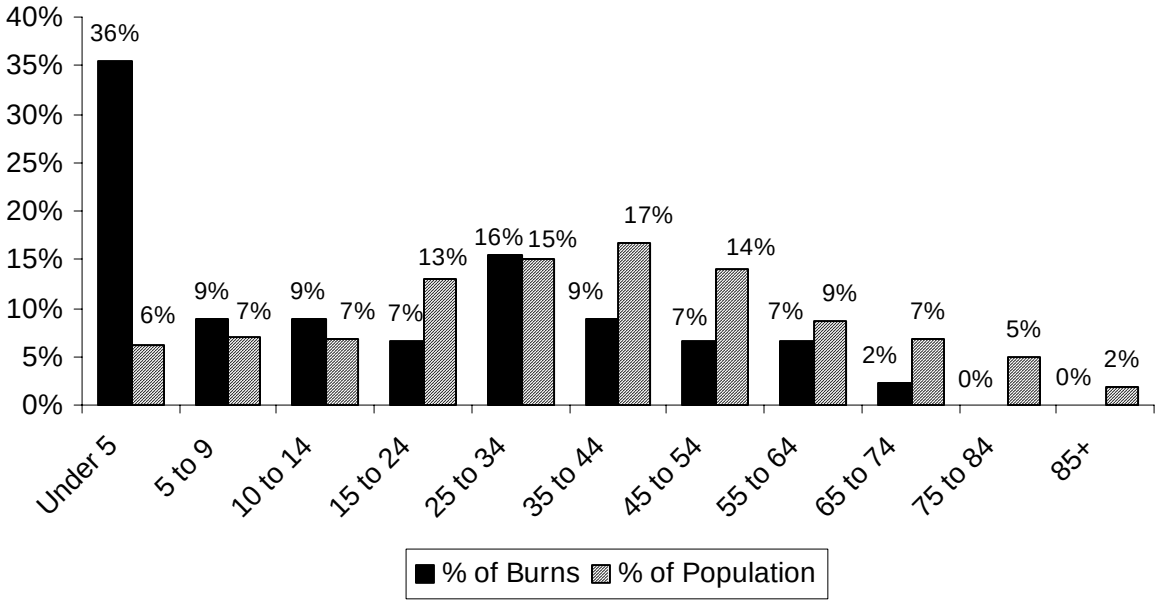
9-Year Old Assaulted With Hot Water
On November 18, 2006, a 9-year old boy received scald burns to his chest, stomach and face when two other children threw hot water at him.

25-Year Old Receives Steam Burn
On November 5, 2006, a 25-year old woman received scald burns to her face and arms from the steam of a pressure cooker while she was checking on the meal she was preparing at home.

Hot Cooking Liquids

Hot Cooking Liquids Caused 34% of Scalds, 13% of All Burns
Hot cooking liquids which includes boiling water, grease and oil, caused 45, or 34%, of the 133 scald burns and 13% of the 358 total burn injuries reported in 2006. Sixty percent (60%) of the victims were male and 40% were female. Hot cooking liquids scalded four people while they were at work, all four were men.

Hot Cooking Liquid Scalds by Age Group



Over 1/3 of Cooking Liquid Scald Victims Were Under the Age of 5

Those most likely to be under foot in the kitchen were most at risk to be burned by hot liquids on the stovetop. Thirty-six percent (36%) of the cooking liquid scald victims were under five years old. They were almost six times more likely to be victims of a hot cooking liquid scald; in 2005 they were only slightly more than times more likely to be victims of a hot cooking liquid scald. Nine percent (9%) were children between the ages of five and nine. Another 9% of these injuries occurred within the age group between 10 and 14; members of the age group between 15 and 24 accounted for 7%; 16% were between 25 and 34, the second highest group of hot cooking liquid scalds; 9% were between 35 and 44; 7% were between 45 and 54; another 7% were between 55 and 64; and 2% were between 65 and 74; no one over the age of 65 received a scald burn injury from hot cooking liquids. The youngest hot cooking liquid scald burn victims were two nine-month old boys, while the oldest person to have one of these burns was a 65-year old woman.

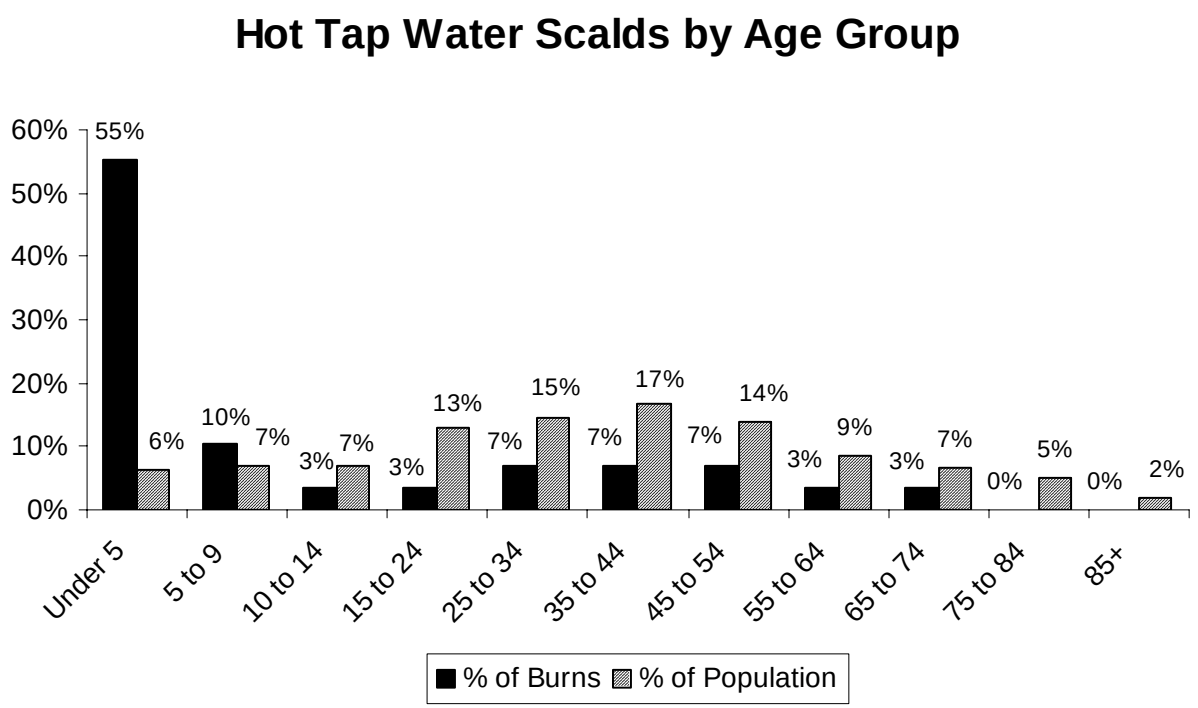
21-Year Old Scalded by Cooking Liquids

On July 10, 2006 a 21-year old woman accidentally spilled boiling water on herself that she was using to cook lunch. She received scald burns to her back, all four limbs, neck and ears, or approximately 40% of her body surface area.

Hot Tap Water

Hot Tap Water Caused 22% of All Scalds
Excessively hot tap water caused 29, or 22%, of the 133 scald burns and 8% of the 358 total burn injuries reported to M-BIRS in 2006. Hot water heaters should be set to temperatures of 125º Fahrenheit or less. Massachusetts law states that the temperature must be set between 110º and 130º F and most dishwashers have coils to boost their internal water temperature. It is important for homeowners to make sure their own water heaters are set in the appropriate range. At 155º F it takes only one second to sustain a third degree burn. At 130º F it takes thirty seconds. At 120º F it can take a full five minutes to sustain a third degree burn.[2] Adults may prepare a safe bath, but a child may turn on the hot water if left alone for a moment or two. Experts recommend placing a child in the tub facing away from the faucet.

In 2006, 55% of the victims were male while the other 45% were female. Since the beginning of M-BIRS, 53% of the hot tap water scald victims have been men and 47% have been women, but in the previous two years more females have been burned by hot tap water than males. Four of the 29 victims, two men and two women were scalded during work-related activities.



Over 1/2 of Tap Water Scald Victims Were Under the Age of 5
Fifty-five percent (55%) of the 29 hot tap water scald victims of known age were less than five years old. Some were very young infants placed in water that was too hot for their sensitive skin. Other children were interested in exploring their environment and turned on faucets. Last year in 2005, 76% of the hot tap water scald burn victims were under the age of five.

[2] Source: Knapp Burn Foundation

Ten percent (10%) of the reported hot tap water scald burn victims were between the ages of five and nine years old; 3% were between 10 and 14 years of age; another 3% were between 15 and 24 years of age; 7% were between the ages of 25 and 34; another 7% were between 35 and 44; another 7% were between the ages of 45 and 54; 3% of hot tap water scald victims were between 55 and 64; and another 3% were between 65 and 74 years of age; no one over the age of 74 received a hot tap water scald injury. The youngest hot tap water scald burn victim was a two-month old boy, while the oldest person to have one of these burns was a 74-year old man.

5-Month Old Receives Scald Burns in Tub
On December 1, 2006, a 5-month old girl received burns to 60% of her body surface area. Her parents had her 'greased up' for a bath and the victim fell into the hot water. The grease was applied as a cultural custom prior to bathing.

9-Year Old Scalded in Shower
On September 25, 2006, a 9-year old boy was scalded while he was taking a shower. He received second-degree burns to approximately 27% of his body and first-degree burns to 1% of his body surface area.

Hot Beverages

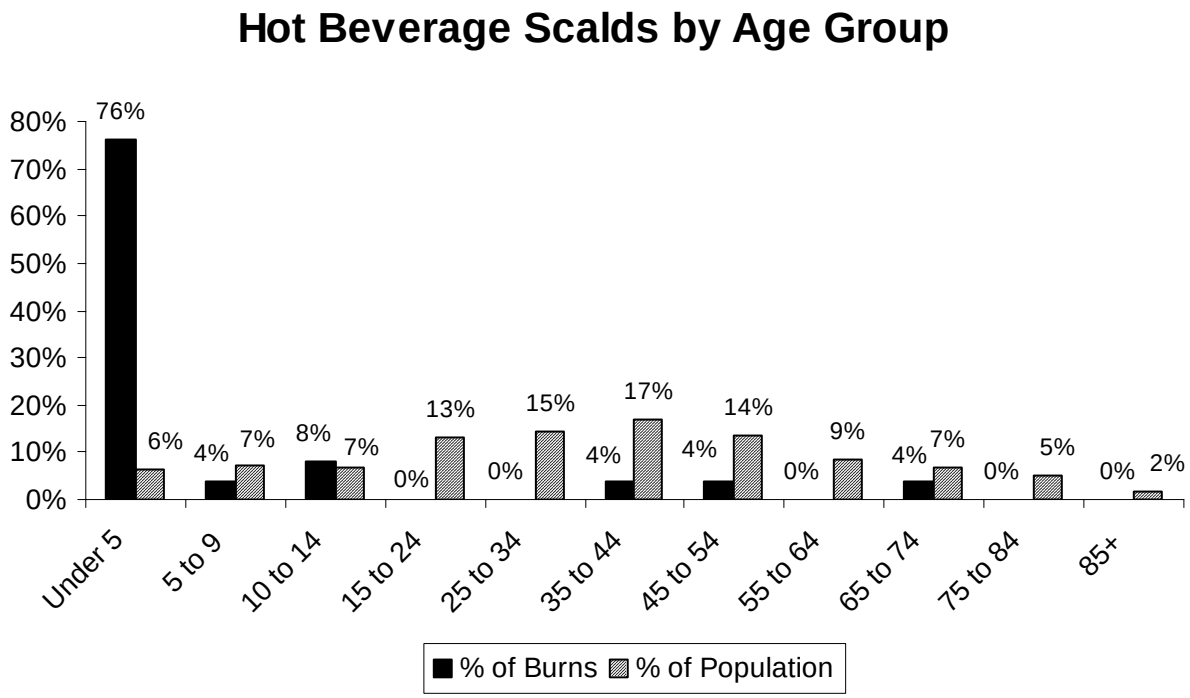
Hot Beverages Caused 19% of All Scalds
Twenty-five (25), or 19%, of the 133 scald burns were caused by hot beverages. In 2004, hot beverages were responsible for 52, or 35%, of all scald burns, and in 2005 they were responsible for 35, or 27%, of all scald burns. This is a strong down turn. These 25 burns accounted for 7% of the 358 burn injuries reported in 2006. Hot beverages have been the leading cause of scald burns since the inception of M-BIRS in 1984 except for 1999, 2005 and 2006.

Sixty percent (60%) of the 25 hot beverage scald victims were male and 40% were female. In 2006, no one was reported to have received a hot beverage scald while working.

Over 3/4 of the Hot Beverage Scald Victims Were Under 5
Seventy-six percent (76%) of the 25 hot beverage scald victims of known age were less than five years of age. Children under five years old were 12 times more likely to be scalded by a hot beverage. Ten (10), or 40%, of the victims who were scalded were one-year old or younger. Another six, or 24%, were two-year old toddlers. Last year, 66% of the victims of hot beverage scalds were less than five years old.

Four percent (4%) of the hot beverage scald victims were between five and nine years old; 8% were between the ages of 10 and 14; there were no reported scald burn injuries to anyone between the ages of 15 and 34; 4% were between 35 and 44; another 4% were between 45 and 54; no one between the ages of 55 to 64 received a scald burn injury from hot beverages in 2006; 4% of these victims were between the ages of 65 and 74. No one over the age of 69 received a

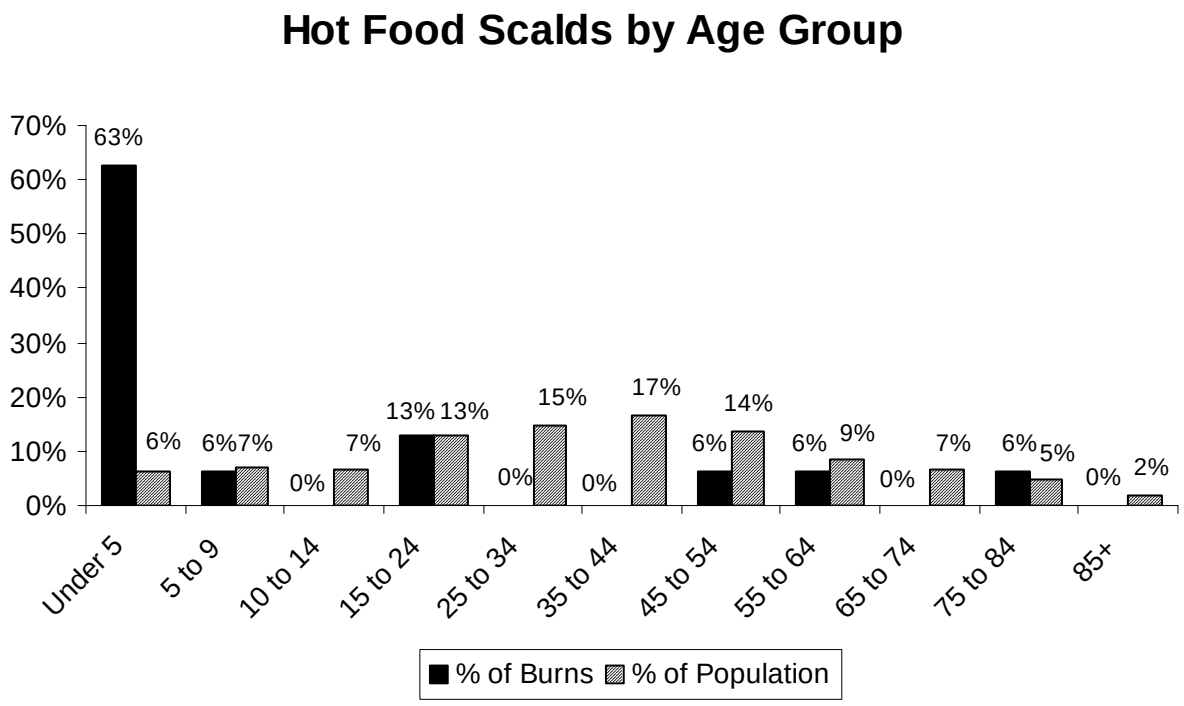
scald burn injury from a hot beverage. A six-month old boy was the youngest person to be scalded by a hot beverage in 2006, while the oldest person was a 69-year old woman.



Hot Food

Hot Food Caused 12% of Scalds, 4% of All Burns
Hot food caused 16, or 12%, of the 133 scald burns and 4% of the 358 total burn injuries reported in 2006. Fifty-six percent (56%) of the victims were male and 44% were female. There was one work-related hot food scald reported in 2006 to a 57-year old woman.

Almost 2/3 of Hot Food Scald Victims Were Under 5
Of the 16 reported scald victims from hot food in 2006, 63%, almost two-thirds, were under five years old; one victim, or 6%, was between five and nine; no one between the ages of 10 and 14 received a scald burn from hot food in 2006; two victims, or 13%, were between 15 and 24; there were no reported hot food scald burn injuries to anyone between the ages of 25 and 44; another victim, or 6%, was between 45 and 54 years old; there was another victim, or 6% of these injuries, between the ages of 55 and 64; no one between the ages of 65 and 74 received one of these types of burns; 6% were between the ages of 75 and 84; and no one over the age of 85 was reported to have received a scald burn injury from hot food in 2006. The youngest hot food scald burn victim was a one-month old girl, while the oldest person to have one of these burns was an 84-year old man.



84-Year Old Man Receives Scald Burns from Food
On December 13, 2006, an 84-year old man received scald burns to his neck, chest, back, right hand, abdomen and groin when he accidentally spilled five gallons of boiling pasta sauce on himself while preparing dinner at home.

Car Radiators

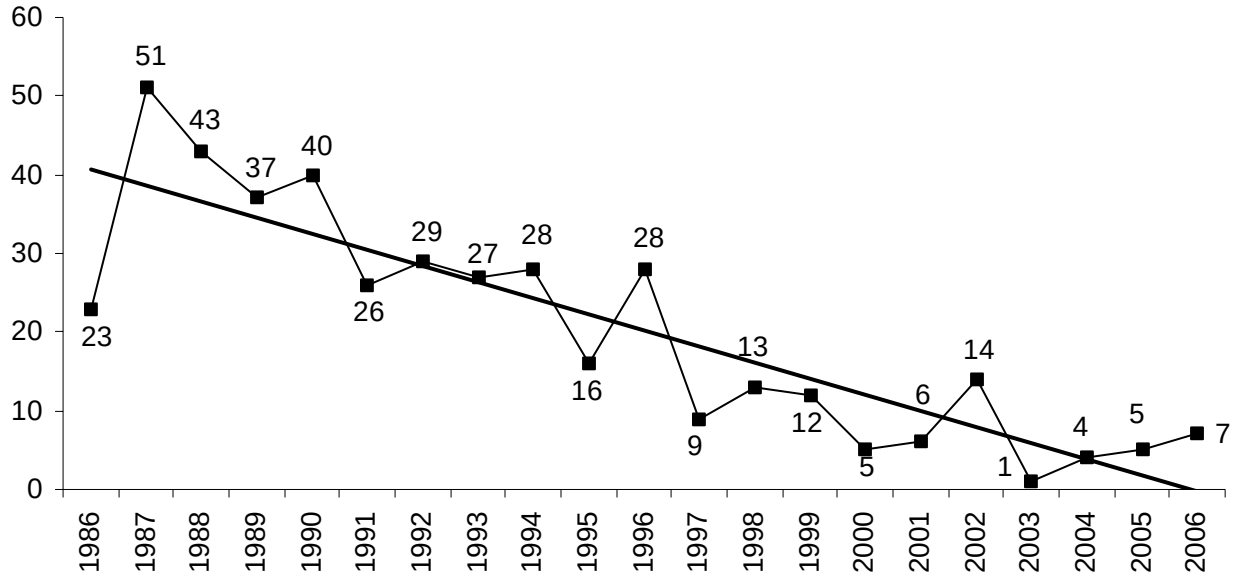
Seven Reported Car Radiator Scald Burns In 2006
In 2006, there were seven reported scald burn injuries caused by the improper opening of a hot car radiator. All seven of the victims, were male. Three (3), or 43%, of the car radiator scald victim were between the ages of 15 and 24, one, or 14%, was between 25 and 34; another victim (14%) was between the ages of 35 and 44; and two victims, or 29%, were between the ages of 45 and 54 years old.

These seven injuries are a slight increase over the five injuries reported in 2005 and the four injuries reported in 2004. As the chart below depicts, even though there have been some years where the number of reported car radiator burns has increased from one year to the next, only twice has there been an increase two years in a row, from 2000 to 2002 and from 2003 to 2006 and now another small increase of two reported car radiator scalds from 2005 to 2006. But when working with such small numbers, even the slightest increase can seem disturbing. Overall the trend for the past 21 years has been one of decline. From 1987 to 2006 there was an 86% drop in reported car radiator scald burns. From 1997 to 2006 there was a 22% drop in reported car radiator scald burns.

The main reason for this drastic decline in car radiator scalds is changes in car radiator design. The radiators now come with pressure relief caps that divert coolant to the overflow reservoirs at lower pressures than before, and today's coolants work at higher temperatures. These engineering changes have significantly reduced this type of injury.

Three of these seven burns occurred during the month of august; another three occurred in September, and the seventh occurred in early October.

Number of Car Radiator Scalds by Year



23-Year Old Man Receives Scald Burns to 22% of His Body
On August 23, 2006, a 23-year old man received scald burns to 22% of his body when he opened his overheated car radiator.

24-Year Old Man Receives Scald Burns to Chest & Neck
On August 23, 2006, a 24-year old man opened his overheated car radiator and received burns to his chest and neck, or 15% of his body surface area.

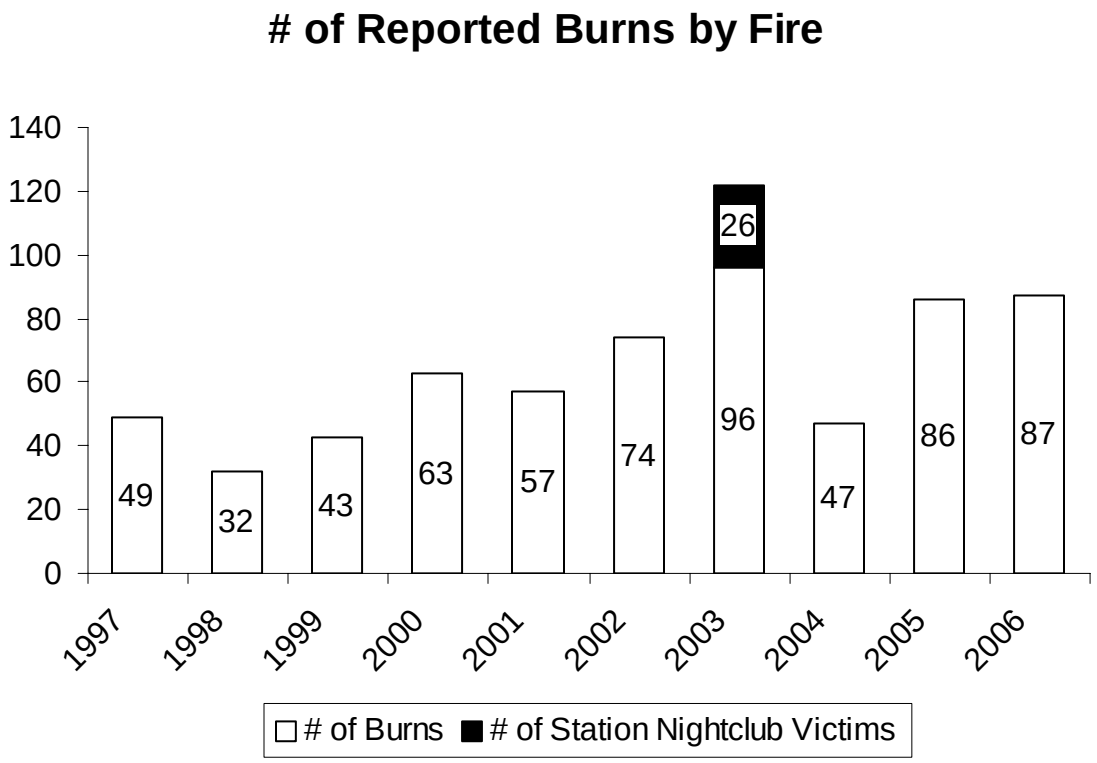
Car Radiator Safety Measures

- ✓ When your car overheats, keep in mind that the contents of the radiator are under tremendous pressure. If you open it, the boiling liquid and steam can erupt and cause severe burns to your hands, arms and face. Wait at least a half hour for the car to cool down, and then use a rag to slowly open the cap, releasing the pressure as slowly as possible.

- ✓ The coolant in your overflow reservoir may also be extremely hot and may also be under pressure. Take the same precautions when opening the coolant reservoir that you would when taking off the radiator cap.

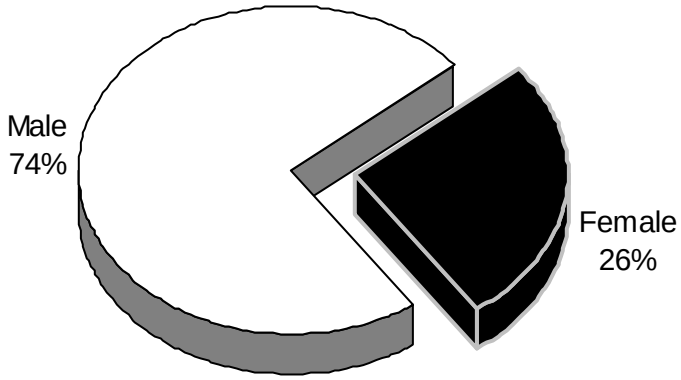
Burn Injuries Caused by Fires

Fires Caused Almost 1/4 of All Burn Injuries
Eighty-seven (87), or 24% of the 358 burn injuries reported in 2006 were caused by fires. This is an 1% increase over the 86 fire burns reported in 2005; an 85% increase over the 47 burns reported in 2004; and a 28% decrease from 2003 which included 26 victims from the fire at The Station nightclub in West Warwick, Rhode Island on February 20, 2003. Even if we exclude these victims from our calculations there was still a 6% drop in reported fire burn injuries from 2003 to 2006 but a 28% increase in burn injuries caused by fire from 2002 to 2006. The following graph shows the number of burns from fire reported to M-BIRS from 1997 through 2006.



Seventy-four percent (74%) of the 87 victims were male and 26% were female. Analysis of data from the Massachusetts Fire Incident Reporting System found that the majority of fire injuries occurred while the victim was attempting to control the fire and that men are more likely than women to attempt to control the fire and become injured.

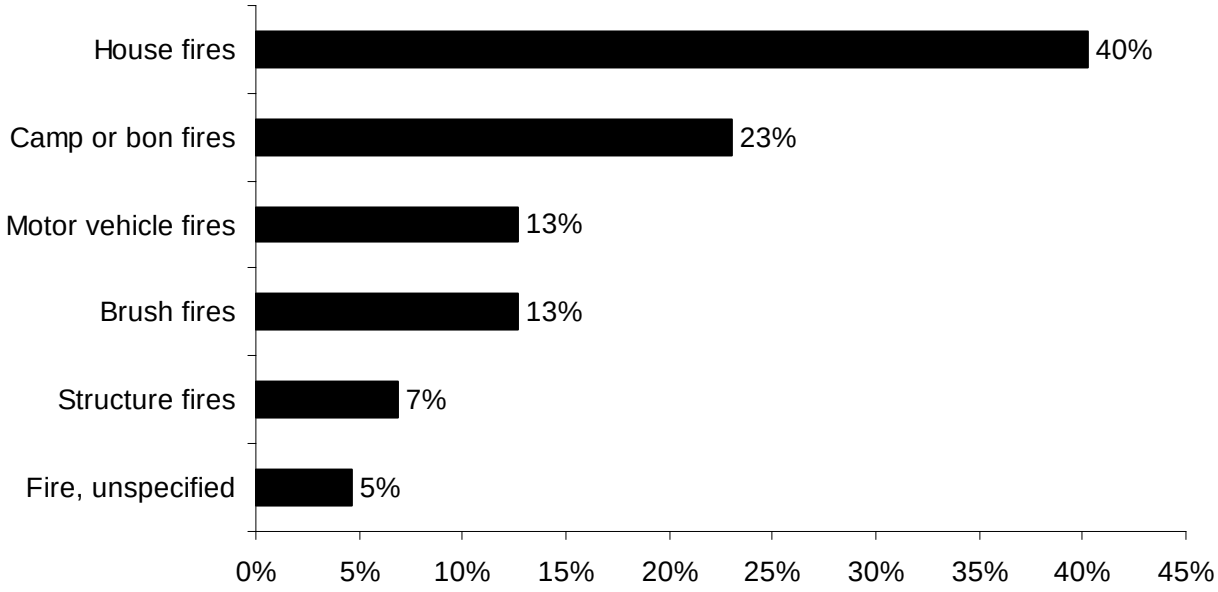
Fire Burn Victims by Gender



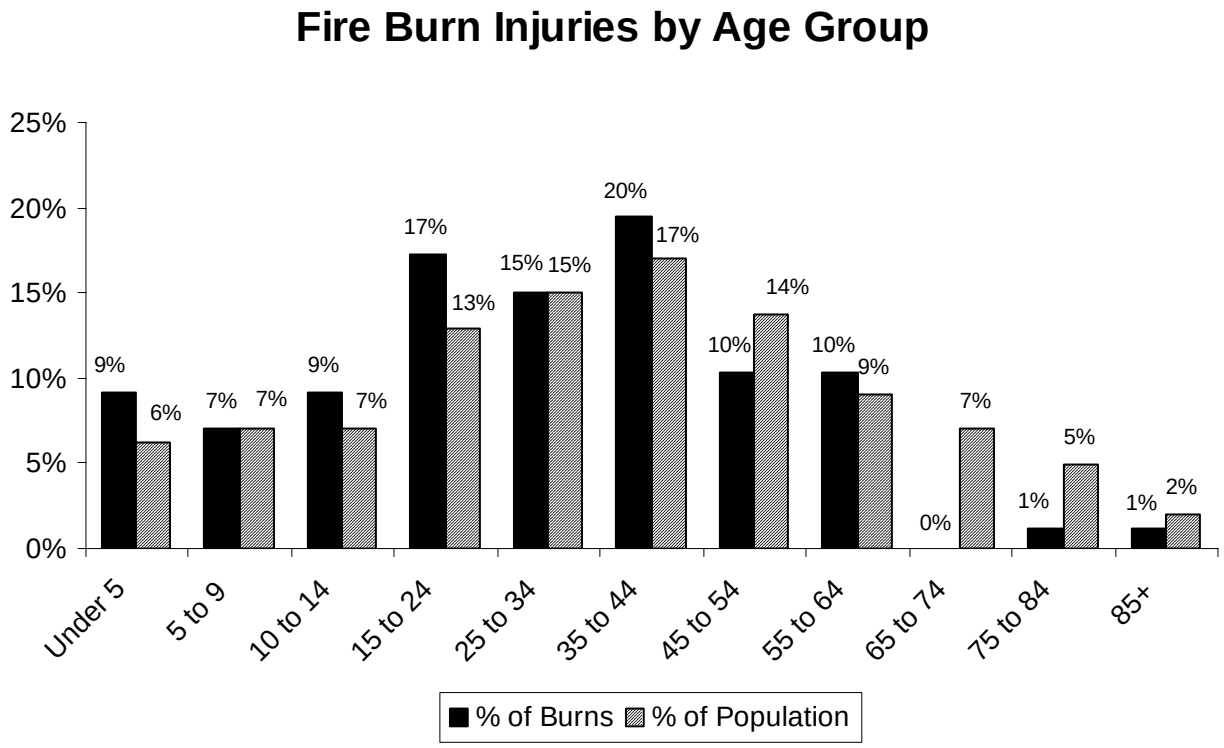
40% of Fire Burn Injuries Occurred in People's Homes

Residential fires caused 35, or 40%, of the 87 fire burn injuries reported in 2006. Twenty (20), or 23%, were caused by camp or bon fires; 11, or 13%, were due to motor vehicles fires; another 11, or 13%, of the victims received their burns in brush fires; six victims, or 7%, were burned in non-residential structure fires; and four victims, or 5%, of fire burn injuries occurred in an unclassified fires.

Types of Fires Causing Burns



Young Adults Most Likely to Be Burned in Fires
Eight (8), or 9%, of the victims burned in fire incidents were under five years old; six, or 7%, were between five and nine years of age; eight, or 9%, were between 10 and 14; 15, or 17%, were between 15 and 24; 13, or 15%, were between 25 and 34; 17, or 20%, were between 35 and 44; nine, or 10%, were between the ages of 45 and 54; another nine, or 10%, were between the ages of 55 and 64; no one between the ages of 65 and 74 was reported to have received a burn injury at a house fire in 2006; one victim, or 1%, was between 75 and 84; and another victim, or 1%, was over the age of 85 in 2006.



Reported Burns Are a Fraction of Injuries From Fires
Only burn injuries that extend to 5% or more of the body surface area and are treated by a medical professional are reported to the *Massachusetts Burn Injury Reporting System*. Consequently, the human cost of fires is under-reported in this analysis. Smoke inhalation, cuts, fractures and less severe burns incurred while fighting or fleeing the fire are not recorded here. Fire deaths are not recorded. Properly maintained smoke detectors and quick-response residential sprinklers could prevent many of the injuries caused by fires. Detectors sound an early warning to leave the area and quick-response sprinklers can control or possibly extinguish a fire in its earliest stages.

Refer to MFIRS Annual Report for More Information about Fires
For more information about the causes of fires and fire-related casualties, please refer to the *Massachusetts Fire Incident Reporting System – Annual Reports*. Using data collected by the Massachusetts Fire Incident Reporting System (MFIRS), these reports examine the causes of fires, fire deaths and fire injuries. Information is provided on fires in different occupancies and

on special topics such as children and fire, fires caused by smoking, electrical fires, cooking fires and heating equipment fires.

5 Fire Deaths Recorded in M-BIRS
Five (5) of the victims that were reported to have received their burn injuries from fires died as a result of their injuries. Three (3) of these were the result of residential structure fires. Of these three victims, one was injured while smoking, one of the fires was started by a propane leak and one was an unspecified house fire. Another victim was a homeless man who fell asleep while smoking and set his clothing on fire and that started a brushfire; and the other victim was injured in a motor vehicle fire when a mechanical failure caused him to lose control of his dump truck; it crashed into another vehicle before crashing into a building and igniting.

54-Year Old Man Dies in House Fire Caused by Smoking
On January 14, 2006, a 54-year old Plymouth man received burns to 90% of his body surface area in a house fire caused by smoking. He was transported to a local hospital were he eventually died from his burn injuries.

48-Year Old Homeless Man Dies While Smoking Outside
On March 30, 2006, a 48-year old homeless man received burns to 56% of his body surface area. He was outside when the cigarette he was smoking ignited his clothing and also started a brush fire.

16-Year Old Girl Severely Burned in Motor Vehicle Accident (MVA)
On April 28, 2006, a 16-year old Dartmouth girl received burns to 70% of her body surface area when she was involved in a motor vehicle accident.

29-Year Old Man Dies in MVA
On June 19, 2006, a 29-year old Springfield man was driving a dump truck in Worcester while working, when the truck suffered a mechanical failure causing it to crash into another vehicle. The crash started a fire in which the victim received burns to over 40% of his body surface area. The victim succumbed to his injuries a week later.

50-Year Old Severely Burned in House Explosion
On July 5, 2006, a 50-year old Chesterfield man received burns to over half his body when his house exploded.

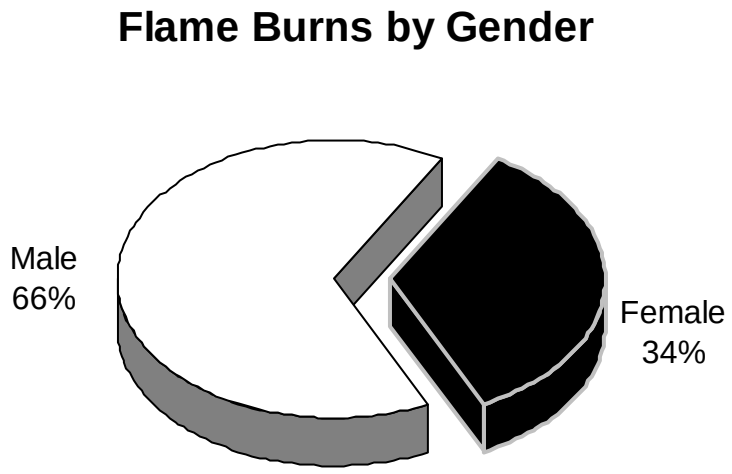
82-Year Old Woman Dies in Propane Fire
On August 16, 2006, an 82-year old Amherst woman was killed when a propane leak caused her house to explode. The victim and her husband were both treated for burns and transferred from a local hospital to one in Boston for more treatment. She later succumbed to her injuries in Boston.

38-Year Old Man Killed in House Fire
On October 1, 2006, a 38-year old Melrose man sustained burn injuries to his face. He was transported to a local hospital and then transferred to a Boston hospital. He eventually succumbed to his injuries.

Flame Burn Injuries

Flames Caused 19% of Reported Burn Injuries
For the second year in a row, there were 67 reported flame burn injuries. These 67 injuries accounted for 19%, of the 358 burn injuries reported in 2006. A burn is said to result from flame when the fire is confined to the victim or the victim's clothing. When a wider area burns, the cause of the injury is considered a fire. Burns caused by self-immolation, smoking in bed or burning clothing usually result from flames.

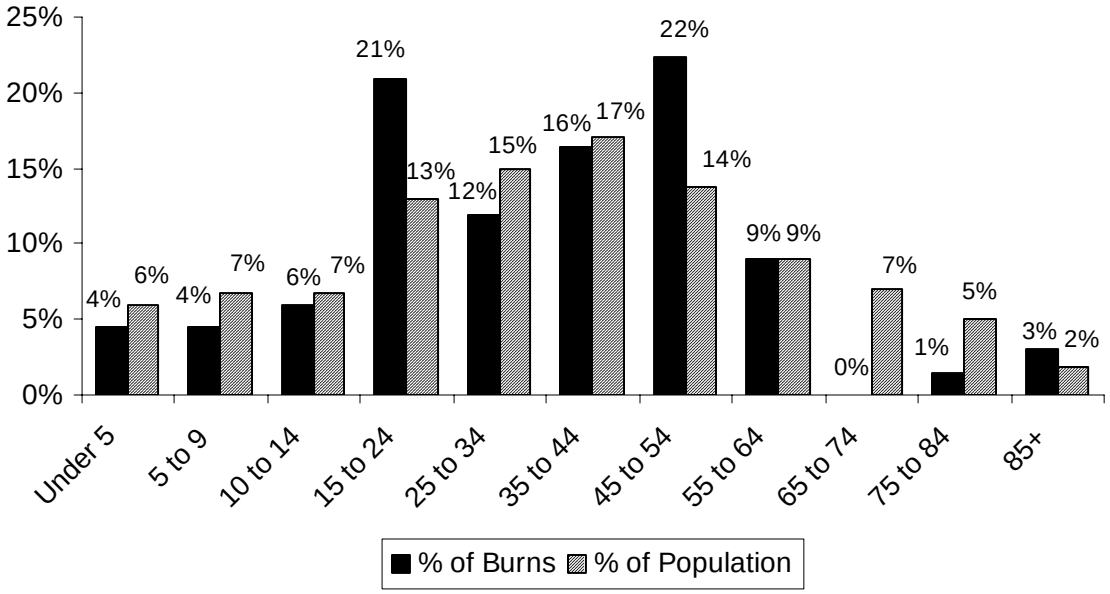
Sixty-six percent (66%) of the flame burn casualties were male and 34% were female. Six (6), or 9%, of the 67 flame burns occurred during work-related activities; all six were men.



Young, Middle Aged & Older Adults 85+ Faced Highest Risk of Flame Burns
Three groups were at a higher risk for burns from flames. Young adults between the ages of 15 and 24, middle aged adults between the ages of 45 and 54 and adults over the age of 85 were all 1.6 times as likely to receive a flame burn injury.

Four percent (4%) of the 67 flame burn victims were children under the age of five; another 4% were between the ages of five and nine; 6% were between 10 and 14; 21% were victims with ages 15 to 24; 12% were between 25 and 34; 16% were between 35 and 44; 22% were between 45 and 54; 9% were between 55 and 64; no one between the ages of 65 and 74 received a flame burn injury; 1% were between 75 and 84; and 3% were over the age of 85. The youngest person to receive a flame burn injury was a four-year old boy, while the oldest was a 91-year old woman.

Flame Burn Injuries by Age Group



Cooking Was the Leading Cause of Flame Burns

Cooking was the leading cause of flame burn injuries in 2006. Thirteen (13), or 19%, of all flame burn victims received their injuries while cooking. These 13 cooking-related flame burn injuries were comprised of, five, or 7% of the total flame burn injuries, involved clothing ignitions while cooking. Three (3), or 4%, of the victims were burned while barbequing. Two (2), or 3%, of the cooking-related flame burns involved an unreported cooking activity. Another two (2), or 3% of the victims, received their flame burn injuries from ignitions of hot cooking liquids, generally grease or oil. One (1), or 1%, of the victims received their injury by coming into contact with a hot oven.

Ignitable Liquids Caused 18% of Flame Burn Injuries

In 2006, ignitable liquids caused 12, or 18%, of flame burn injuries. Gasoline caused seven, or 11%, of the flame burns. The other five burns, or 7% of these injuries, were caused by unspecified ignitable liquids.

Smoking Also Caused of 18% of Flame Burn Injuries

Smoking accounted for 12, or 18%, of all flame burn injuries in 2006. Five (5), or 7%, of the flame burn injuries involved unspecified smoking materials. Three (3), or 4%, of these victims were burned while smoking while on home oxygen. Two (2) flame burns, or 3%, were from smoking while in bed. One (1) was an ignition from a cigarette lighter accounting for 1% of these injuries; and another victim received a flame burn injury from a lit cigarette, also accounting for 1% of the flame burn injuries in 2006.

Candles, Heating Equipment & Torches Each Involved in 7% of All Flame Burns
Candles were the cause of five, or 7%, of 2006 flame burn injuries. Welding and cutting torches were also the cause of five, or 7%, of these flame burn injuries. Three (3), or 4%, were caused by welding and the other two, or 3%, were caused by cutting torches. Five (5) other flame burn injuries involved heating equipment, accounting for 7% of these types of injuries. Two (2) injuries, or 3%, involved woodstoves. A boiler, a fireplace and an unspecified heater were each the cause of one, or 1%, of the flame burn injuries in 2006.

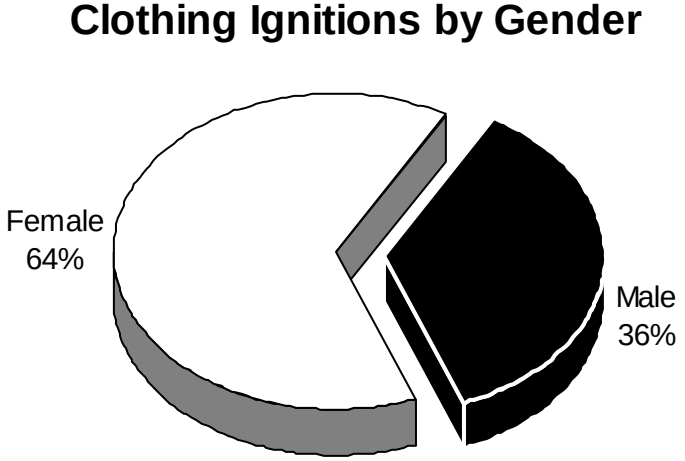
Four (4), or 6%, of flame burn injuries involved an assault on the victims. Alcohol was involved in two, or 3%, of flame burn injuries. Explosives also caused two, or 3%, of flame burns. One (1), or 1%, of these injuries was caused by fireworks, and the other injury, or 1%, was caused by unspecified explosives. Ignitable gases also caused two, or 3%, of these burns. Propane and natural gas were each involved in one, or 1%, of flame burns.

A child playing with a lighter, an unspecified clothing ignition, flammables, a flashburn, and an unspecified flame burn injury each accounted for one, or 1%, of these burns.

Clothing Ignitions

Clothing Ignitions Account for Over 1/5 of Flame Burn Injuries
There were 14 clothing ignitions resulting in flame burn injuries accounting for 21% of all flame burn injuries. Clothing ignitions while cooking were the cause of six, or 9%, of these injuries. Three (3) victims, or 4% of the flame burn injuries, received her burn when a candle ignited their clothes. Two (2) victims' clothing ignited while after coming into contact with gasoline, accounting for 3% of all flame burn injuries in 2006. Another two victims, or 3%, had their clothing ignite after coming into contact with a heater; and one individual's clothing burned because of fireworks, accounting for 1% of flame burn injuries in 2006.

Almost 2/3 of Clothing Flame Burn Injuries Were Female
Nine (9), or 64%, of clothing ignition victims were women and five, or 36% were men.



Only 2 of All Flame Burn Injury Victims Due to Clothing Ignitions Were Over 65
Two (2), or 14% of all the victims of flame burn injuries due to clothing ignitions were over 65-years old. One was a clothing ignition while cooking, the other was from a candle.

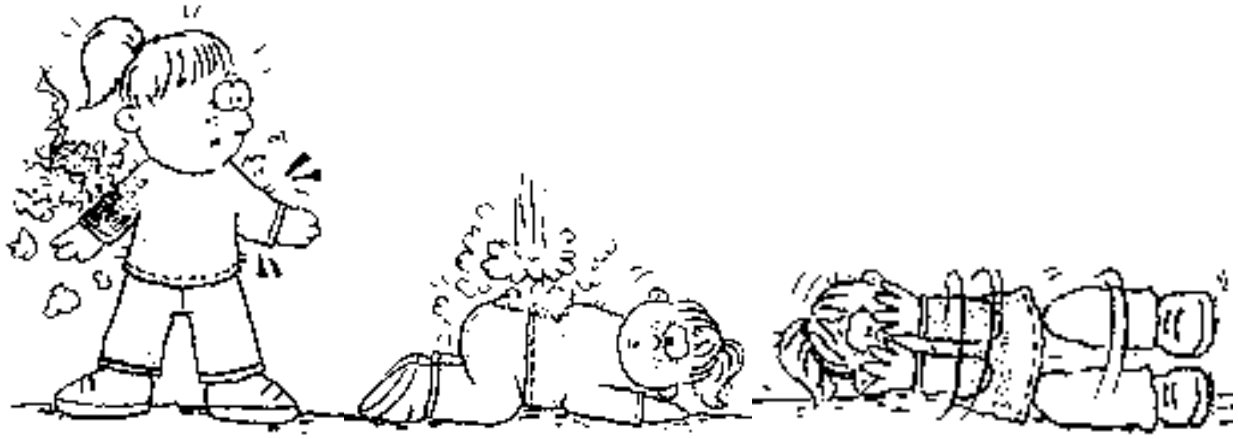
Two (2) children (14%) under the age of five received a flame burn due to a clothing ignition. Another two children (14%) between the ages of five and nine also received these burns. Two (2) more children between the ages of 10 and 14 received one of these injuries, accounting for another 14%. There was one victim in the age group, 15 to 24, accounting for 7% of these burns. One victim, or 14%, was in the age group 25 to 34 years old. The age groups 25 to 44 and 35 to 44 each had one victim accounting for 7% of the clothing ignition flame burn injuries in 2006. Two (2) victims, or 14%, of flame burn injuries due to clothing ignitions was between 45 and 54 years old. One (1) victim, or 7% was between 55 and 64 years old. No one between the ages of 65 and 84 received a clothing ignition flame burn. There was one victim, or 7% of these types of burn injuries, in the age group over 85 years old. The youngest person to receive a flame burn injury from a clothing ignition was a 4-year old girl whose clothes were ignited when she walked too close to a candle; the oldest victim from a clothing ignition flame burn injury was a 91-year old woman who also received her injuries from being too close to a candle.

59-Year Old Woman Severely Burned While Smoking
On May 4, 2006, a 59-year old Dennis woman accidentally ignited her clothes while smoking at home and received life-threatening burns to her chest, face and neck. She was transported to a local hospital and then to a Boston hospital where she was later discharged after receiving treatment for her injuries.

46-Year Old Man Assaulted with Ignitable Liquid
On December 26, 2006, a 46-year old Lawrence man was exiting his apartment building when someone threw an ignitable liquid on him and set him on fire. The victim received burns to 45% of his body surface area from this assault.

ALWAYS REMEMBER TO:

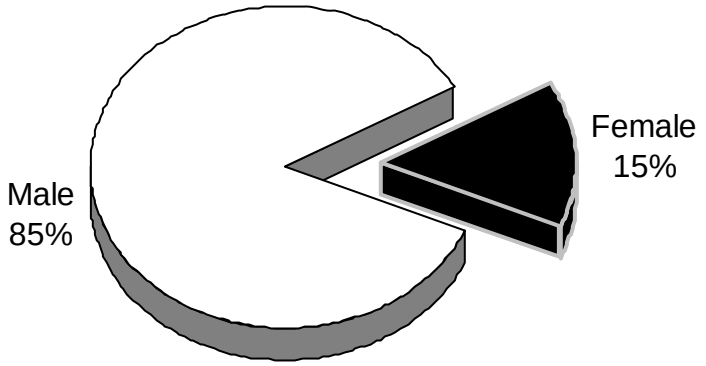
STOP DROP & ROLL



Burn Injuries Caused by Explosions

Explosions Caused 7% of Reported Burn Injuries
Twenty-six (26), or 7%, of the 358 burn injuries reported in 2006 were caused by explosions. That is a 69% decrease from the 44 reported in 2005. Eighty-five percent (85%) of the explosion burn victims were male and 15% were female.

Explosion Burn Injuries by Gender



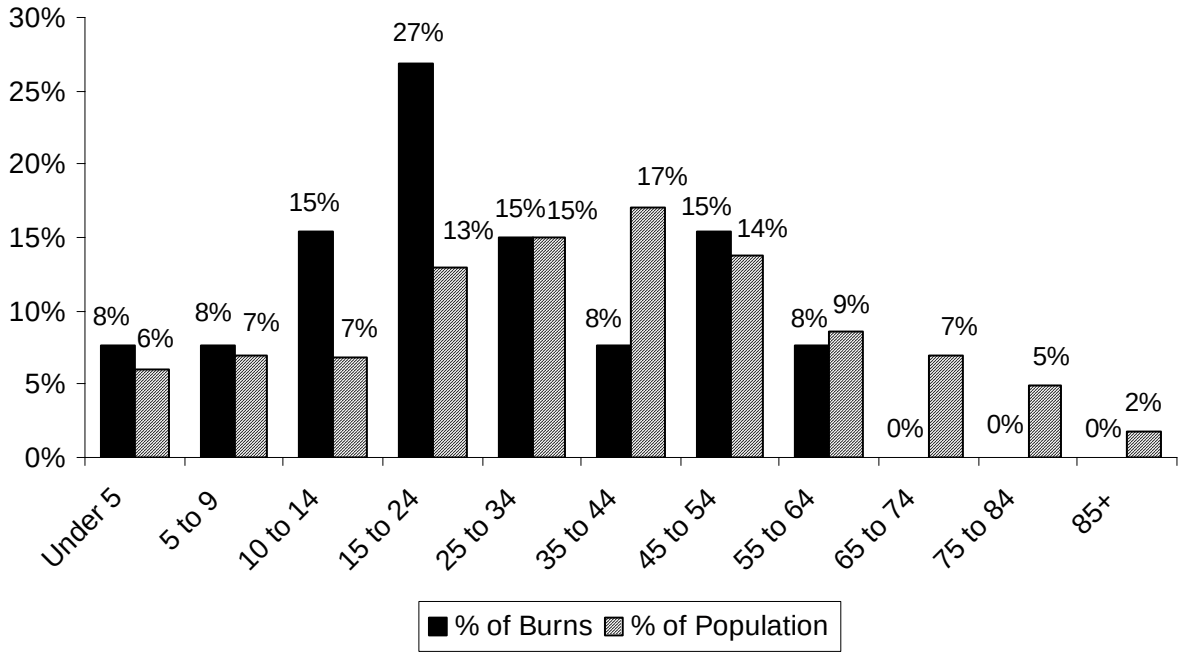
Six (6) burns, or 22%, occurred during work-related activities[5]. All six of these work-related victims were male.

Out of these 26 injuries there was only one explosion with two or more injuries. Both of these victims were men. Two teen-aged workers, ages 17 and 18, were injured in a fireworks warehouse explosion in Nicaragua.

Young Adults Ages 15 to 24 Face Greatest Risk of Explosion Burns
There were two burns from explosions to children under the age of five, accounting for 8% of explosion burn injuries in 2006; another two victims, or 8%, belonged to the age group five to nine years old in 2006; children between the ages of 10 to 14 accounted for four, or 15%, of these injuries; seven, or 27%, were between the ages of 15 to 24; adults between the ages of 25 and 34 received four, or 15%, of the explosion related burns; two, or 8%, were between 35 and 44; four, or 15%, were between 45 and 54 years of age; and two, or 8%, were between 55 and 64 years old. No one over the age of 62 received a burn injury due to an explosion. The youngest victim to receive a burn injury from an explosion in 2006 was a 1-year old girl; and the oldest person to receive one of these burns was a 62-year old man.

[5] On 12/8/06, an explosion occurred in the basement of a 19-story office building in Cambridge. Two NSTAR employees were performing maintenance in the underground electrical vault space where the explosion and ensuing fire originated. One of the workers was killed in the blast, so an M-BIRS report was never filed. The other worker and approximately 35 of the building's office workers were treated for smoke inhalation.

Explosion Burn Injuries by Age Group



Ignitable Liquids & Gases Were the Leading Cause of Explosion Burn Injuries
Ignitable liquids accounted for five, or 19%, of the explosion-related burn injuries in 2006. Four (4), or 15%, were from adults using gasoline; and one, or 4%, was from another ignitable liquid. Ignitable gases also caused five, or 19%, of explosion-related burn injuries. Four (4), or 15%, involved propane, and one, or 4%, was from natural gas.

Aerosol cans were involved in four, or 15%, of explosion burns. Heating equipment was also involved in four, or 15%, of these burns. Two (2), or 7%, involved unspecified heaters; one, or 4% involved a space heater; and another burn, or 7%, involved a boiler.

Fireworks and unspecified cooking acts were each responsible for two, or 7%, of explosion related burns. Electricity caused one, or 4%, of these burn injuries in 2006.

A cutting torch, a motor vehicle accident and an unspecified explosion, each accounted for one, or 4%, of the explosion-related burn injuries in 2006.

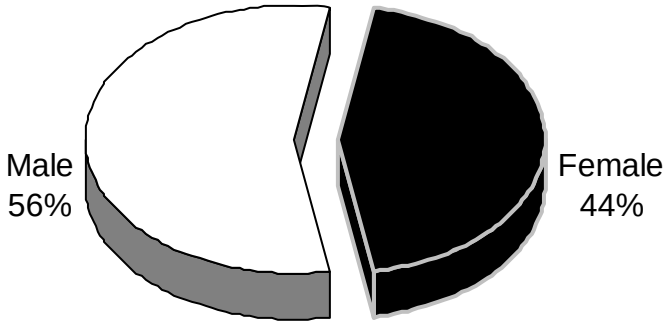
39-Year Old Man Injured in Propane Heater Explosion
On March 25, 2006, a 39-year Plymouth man was attempting to light his propane heater at home. There was an explosion and the victim received severe burns to his face.

49-Year Old Victim of Gasoline Engine Explosion
On July 8, 2006, a 49-year old Falmouth man was riding his jetski in the ocean off a Falmouth beach. Gasoline fumes from the jetski's engine ignited and burned the victim's face and upper and lower extremities.

Contact Burn Injuries

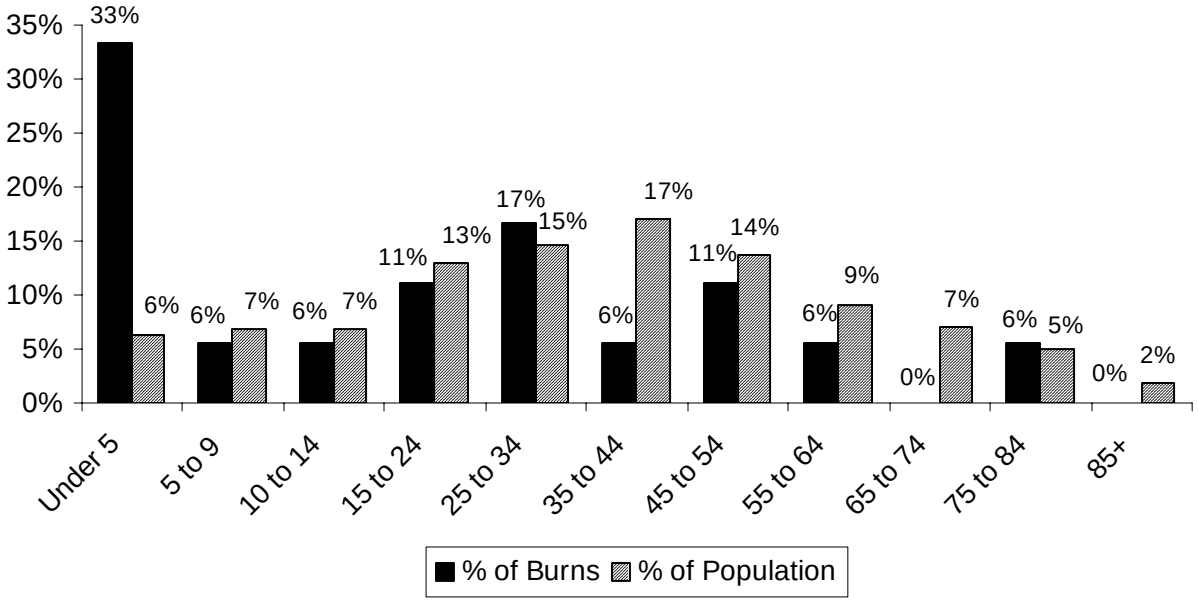
Contact with Hot Objects Caused 5% of Reported Burn Injuries
Eighteen (18), or 5%, of the 358 burn injuries reported in 2006 were caused by contact with hot objects. Fifty-six percent (56%) of the burn victims were male and 44% were female. Three (3), or 17%, of contact burns occurred at work in 2006; one of these three victims died from his injuries.

Contact Burn Injuries by Gender



1/3 of Contact Burns Were to Children Under 5
One-third of all the 18 contact burns reported in 2006 were to children under the age of five. This age group accounted for six, or 33%, of all contact burns. Pre-schoolers faced slightly greater than five times the risk of contact burns or were five times as likely to receive a contact burn. This disproportionate risk could be the result of young children exploring their environment and underscores the need for constant supervision of toddlers. One (1), or 6%, of these burn victims were between the ages of 5 and 9; one adolescent in the age group between 10 and 14 received a contact burn injury accounting for 6%; two, or 11%, where between the ages of 15 and 24; three, or 17%, of the victims were between 25 and 34; the age group 35 to 44 accounted for one victim, or 6%; two victims were in the age group 45 to 54, and accounted for 11% of these injuries; one victim, or 6%, was between the ages of 55 and 64, no one between the ages of 65 and 74 was reported to have received a contact burn in 2006; and one victim, or another 6% of contact burn victims, belonged to the age group 75 to 84 years of age. In 2006, no one over the age of 80 received a burn from contact with a hot object. The youngest person to receive a contact burn in 2006 was a six-month old boy, and the oldest person was an 80-year old man.

Contact Burn Injuries by Age Group



Heating Equipment Was the Leading Cause of Contact Burns
Contact with heating equipment caused six, or 33%, of the contact burns in 2006. Contact with woodstoves caused four, or 22%, of all contact burns; and contact with a heater and a radiator each caused one, or 6% of these types of burns. Cooking caused four, or 22%, of the 18 reported contact burns in 2006. Contact with a stove and unspecified cooking acts each caused two, or 11 of these burns. Hot asphalt and hot metal each caused two, or 11%, of contact burns. A heating pad, lava, wax, and an unspecified contact burn each caused one, or 6%, of the contact burns in 2006.

There were three work-related contact burn injuries in Massachusetts in 2006. Two of these three work-related contact burn victims were men and the other was a woman.

32-Year Old Woman Burns Self on Stove
On May 8, 2006, a 32-year old Boston woman came into contact with a hot stove while she was at work. She received burns to 51% of her body surface area.

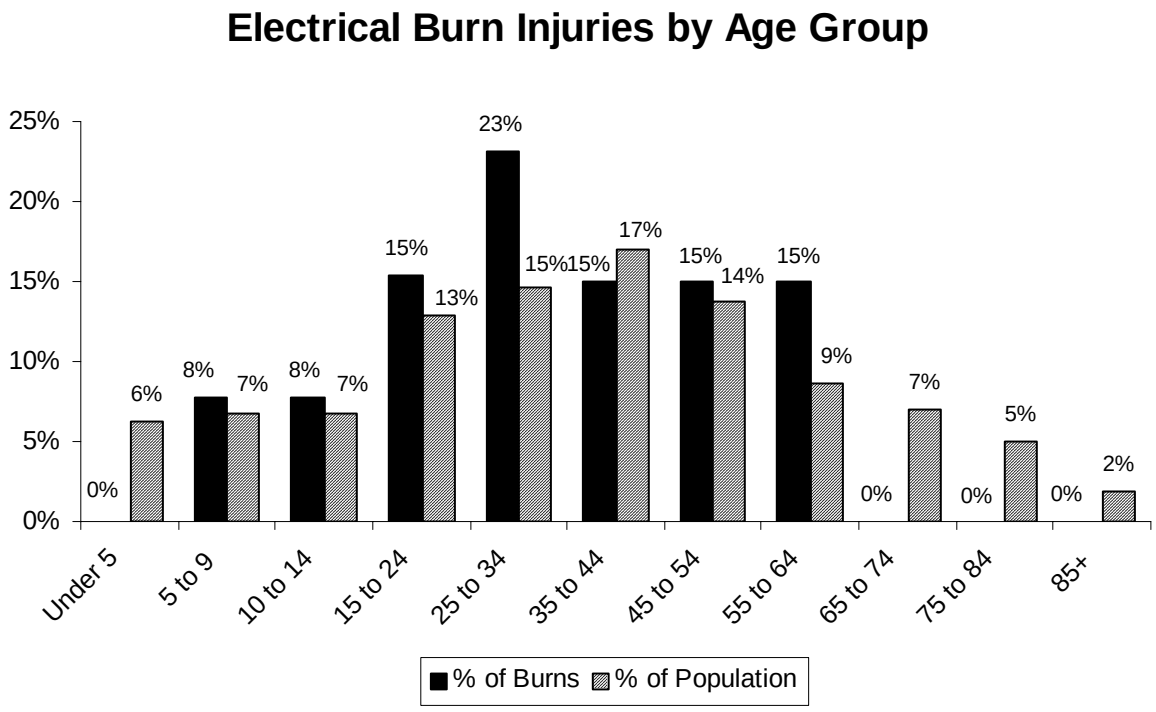
55-Year Old Man Killed by Hot Asphalt
On June 29, 2006, a 55-year old Boston man was helping pave a new basketball court when the load of hot asphalt shifted in the dump truck's bed and accidentally spilled out partially burying the victim and causing burns to 70% of his body surface area. A month later he was removed from life support and died as a result of his injuries.

48-Year Old Man Burned by Hot Asphalt
On November 11, 2006, a 48-year old Ludlow man received burns to his hands and face when he was burned by hot asphalt while at work in Wilbraham.

Electrical Burn Injuries

Electrical Incidents Caused 4% of Burn Injuries
Thirteen (13), or 4%, of the 358 burn injuries reported in 2006 were caused by electrical accidents. All of the electrical burn victims were male. Eight, or 62%, occurred during work-related activities.

All Electrical Burn Victims Were Between the Ages of 7 & 56
No one under the age of seven and no one over the age of 56 were reported to have received a burn from an electrical source. One (1), or 8%, of the victims who received electrical burns in 2006 was between five and nine years old; another victim, or 8%, was between 10 and 14; two of the victims, or 15%, were between 15 and 24; three victims, or 23%, were between 25 and 34; another two victims, or 15%, were between the ages of 35 and 44; two victims, or another 15%, were between 45 and 54. The last two victims belong to the age group 55 to 64 accounting for 15% of all electrical burns. The youngest person to receive an electrical burn injury was a 7-year old boy, and the oldest victim was a 56-year old man.



Over 1/2 of Electrical Burns Were Caused by Electrocutions
Seven (7), or 54%, of the electrical burn injuries in 2006 were from electrocutions. Undefined electrical accidents caused four, or 31%, of these burns. A flashburn and metal scaffolding coming into contact with a power line, each accounted for the one incident, or 8%, of electrical burns in 2006.

25-Year Old Man Touches Electric Connection on Railroad Engine
On July 9, 2006, a 25-year old New York man received life-threatening electrical burn injuries at South Station in Boston. During the night he had apparently climbed on top of an electric Amtrak locomotive to try and sneak aboard the train. He came into contact with the electrical connectors and was found engulfed in flames by the first arriving members of the fire department. Approximately 85% of his body surface area was burned.

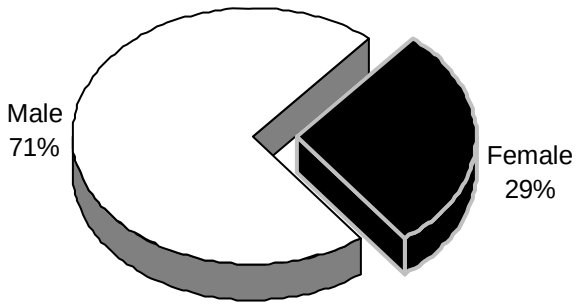
53-Year Old Electrician Electrocuted at Work
On June 14, 2006, a 53-year old male electrician was working at a Boston area hospital when he was electrocuted. He was transferred to another Boston hospital for treatment to burns over 35% of his body surface area.

56-Year Old Man Severely Burned in Electrical Accident
On September 6, 2006, a 56-year old Brockton man was working with sheet metal on scaffolding outside a home in Fairhaven, when the sheet metal came into contact with electrical wires. He received burns to his arms, chest, face and neck. He was transported to a Boston area hospital for treatment.

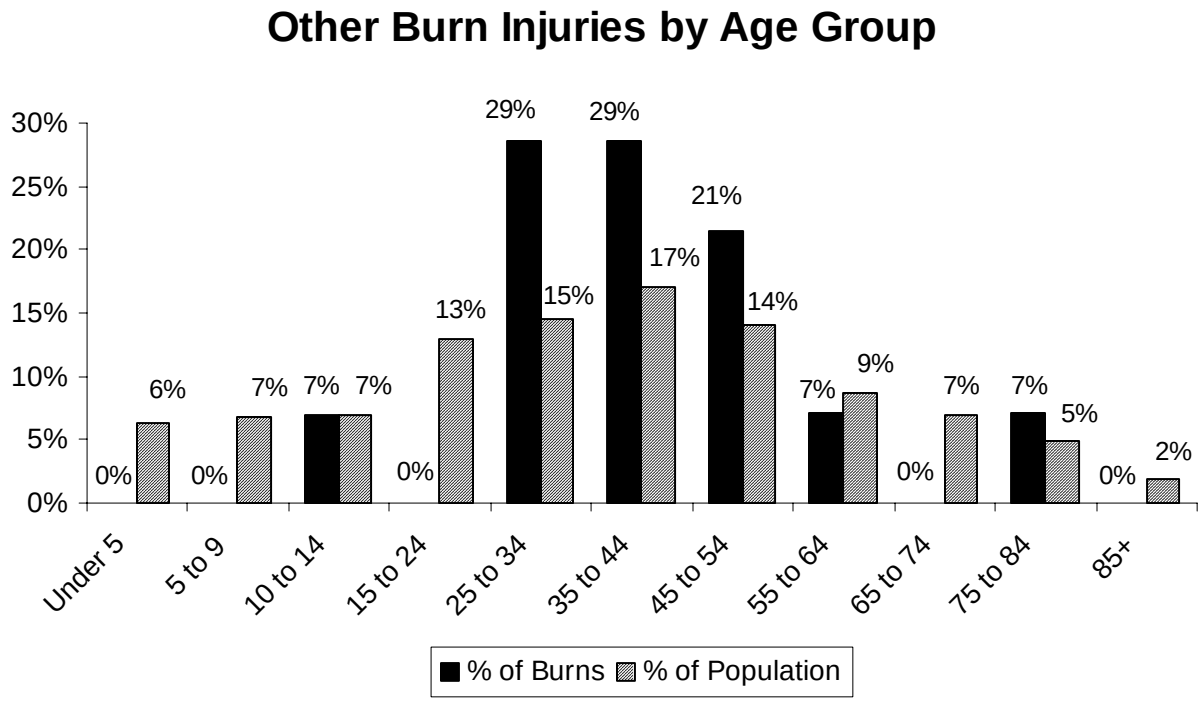
Other Types of Burn Injuries

Chemical Exposures & Sunburns Cause 14 *Other* Burns
In 2006 there were 14 burn injuries that were characterized as *Other*. These include 11 burns, or 79%, caused by exposure to chemicals. Two (2) *Other* burns, or 14%, were attributed to severe sunburns, and one *Other* type burn was caused by an ultraviolet lamp. Seventy-one percent (71%) of the 14 victims were male and 29% were female. Health care facilities reported that seven, or 50%, of the 14 *Other* burn victims were working when injured. Exposure to chemicals is how all three of these victims received their burn injuries.

Other Burn Injuries by Gender



58% of *Other* Burn Victims Were Between 25 to 44 Years Old
In 2006 none of the *Other* burn victims were under 13-years old. One victim, or 7%, of the *Other* burn type victims was between the ages of 10 and 14; no one between the ages of 15 and 24 received an *Other* type of burn injury; four victims, or 29%, were between 25 and 34 years old; another four victims, or 29%, were between 35 and 44; three victims, or 21%, were between the ages of 45 and 54; one victim, or 7%, was between 55 and 64 years old; no one between the ages of 65 and 74 received one of these injuries; and one victim, or 7%, was between the ages of 75 to 84. No one over the age of 79 suffered an *Other* burn injury. The youngest victim was a 13-year old boy and the oldest victim was a 79-year old woman.



31-Year Old Man Received Chemical Burn
On April 13, 2006, a 31-year old Methuen man received burns to his face and upper body when he was sprayed with copious amounts of hydraulic fluid while at work. He was transported to a local hospital and then transferred to a Boston hospital for treatment.

49-Year Old Woman Burned by Drano
On October 15, 2006, a 49-year old Peabody woman received burns to her face, chest, back and upper legs when she accidentally spilled Drano on herself.

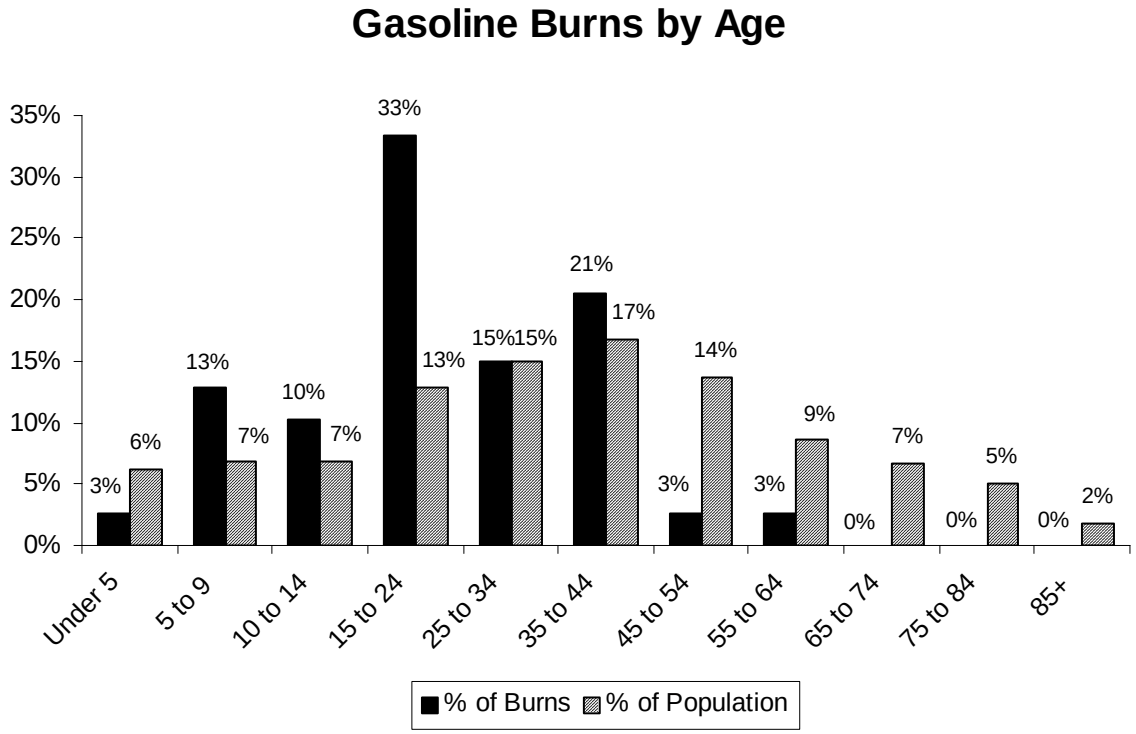
31- Year Old Woman Badly Sunburned
On October 4, 2006 a 31-year old Chelsea woman received a sunburn to approximately 50% of her body. She received her burn while she was in a tanning booth.

Gasoline Related Burn Injuries

Gasoline Involved in 11% of Reported Burn Injuries
Gasoline was involved in 39, or 11%, of the 358 burns reported to M-BIRS in 2006. Gasoline was the primary cause of the injury in 32, or 82%, of these injuries. Because of more detailed descriptions as to how burn injuries occurred, it was determined that gasoline was also involved in seven, or 18%, of other burn injuries that were coded with a different primary description such as an assault, a cigarette, or the use of a cutting torch.

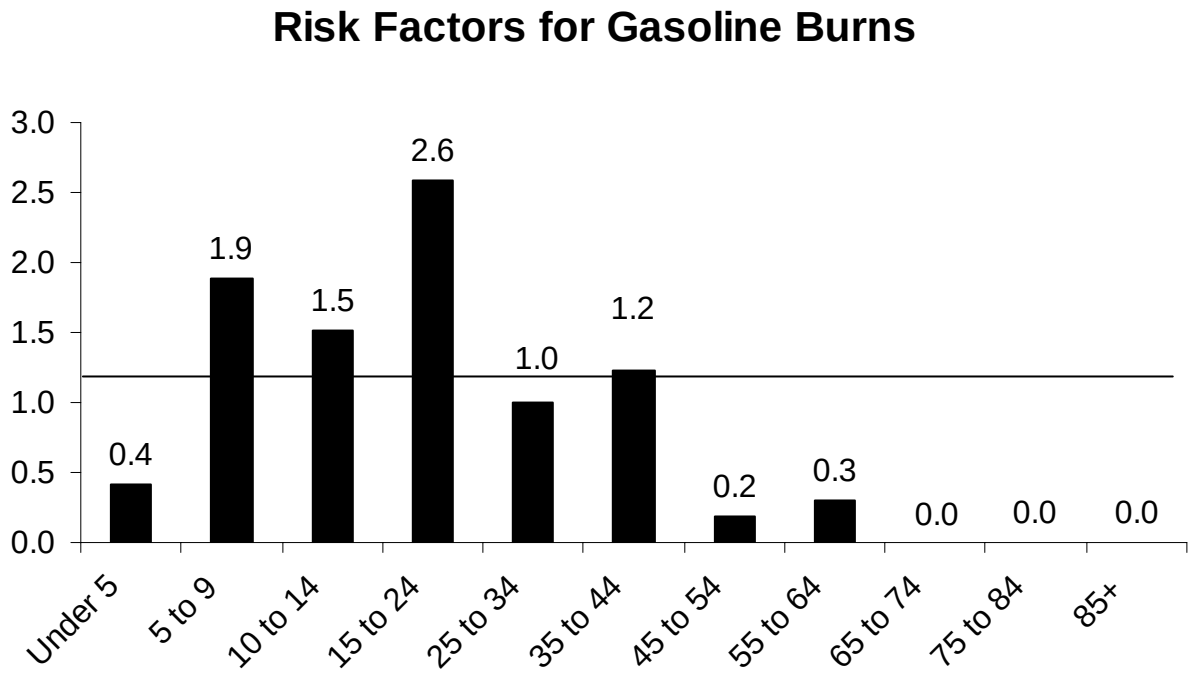
Twenty-one (21), or 54%, of the gasoline related burn injuries were caused by fires. Fourteen (14), or 36%, of the burn injuries involving gasoline were flame burn injuries. Four (4), or 10% were the result of explosions involving gasoline. Thirty-three (33), or 85%, of the 39 gasoline related burn victims in 2006 were men, and six, or 15% were women. Five of the injuries occurred during work-related activities, accounting for 13% of all gasoline related burn injuries. Fourteen (14), or 36%, of the gasoline burn injuries in 2006 were to children; 25, or 64% of these injuries occurred to adults.

1/3 of Gasoline-Related Burn Victims Were Between the Ages of 15 and 24
One (1) victim, or 3% of gasoline burns, was under the age of five in 2006. Five (5) victims, or 13%, were between five and nine years of age. Four (4), or 10%, of the victims were between the ages of 10 and 14 years old. This age group has historically been the most at risk for these types of injuries, but this year this age group was only 1.5 times at a greater risk of gasoline burn injuries. Thirteen (13), or 33%, of the victims were between 15 and 24; young adults in this age group were the most at risk to be burned while handling gasoline, almost three times more likely.



Six (6), or 15%, were between 25 and 34; eight, or 21% were between 35 and 44; one victim, or 3%, was between the ages of 45 and 54; and another victim, or 3%, was in the age group 55 to 64 years old. No one over the age of 59 was the victim of a gasoline burn. The youngest victim was a three-year old girl and the oldest victim was 59-year old man.

The following graph illustrates the risk factor for gasoline burns by age group. If an age group has a risk factor greater than one it is said that an individual in that age group has a greater risk of being burned by gasoline. If an age group has a risk factor less than one, then individuals in that age group have a lesser risk of receiving any burns involving gasoline. Historically, adolescents in the age group 10 to 14 had the greatest risk of getting a burn involving gasoline. However in 2006, that age group was the third most likely to get a gasoline burn. In 2006 children between the ages of five and nine and young adults in the age group 15 to 24 had the greatest risk of getting a burn involving gasoline.



It is actually gasoline vapors that burn, not the liquid itself. The vapors are generated at very low temperatures, are heavier than air and can travel a distance to find a spark or other ignition source. A spark or lit cigarette is enough to ignite the invisible fumes that may linger on clothing. Gasoline is a tool, but a dangerous one, and it demands respect.

18-Year Old Burned While Siphoning Gasoline
On March 22, 2006, an 18-year old Athol man was siphoning gasoline from a car while smoking a cigarette. Some of the gas had spilled on his clothing and was ignited by the cigarette. He received burns to both legs and his right hand.

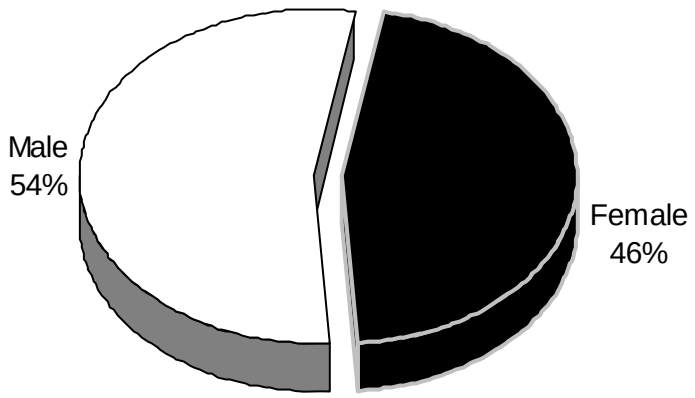
23-Year Old Man Burned By Leaf Blower Explosion
On July 16, 2006, a 23-year old Brockton man was working with a leaf blower when the gasoline fumes from the leaf blower exploded causing burns to the victim's right arm.

Gasoline & a Cutting Torch Don't Mix
On December 4, 2006, a 33-year old Warwick man was using a cutting torch to cut a rusty bolt when the torch accidentally ignited some nearby gasoline. The victim who was working at a service station, received burns to his face, ears, neck and hands.

Some Safety Measures
- If you must store gasoline, store it outside the home in approved safety cans away from open flames (i.e. water heaters and pilot lights) and out of reach of children.
- Never regularly carry gasoline in your trunk.
- A one-gallon approved container could be carried empty to be used only for emergencies.

Burns Caused by Cooking Activities

Cooking Activities Caused Almost 1/4 of Reported Burn Injuries
Cooking activities caused 87, or 24%, of the 358 burn injuries reported to the Massachusetts Burn Injury Reporting System in 2006. Cooking activities were the primary cause of the injury in 86, or 99%, of these injuries. Because of more detailed descriptions as to how burn injuries occurred, it was determined that cooking activities were also involved in one, or 1%, of other burn injuries that were coded with a different primary description such as 'steam'.
Forty-seven (47), or 54%, of the 87 victims were male and the other 40, or 46%, were female.
Eight (8), or 9%, of the 87 people burned by cooking activities were working when injured.



Sixty-four (64), or 74%, of the 87 burn injuries caused by cooking were scalds. Forty-five (45), or 70%, of these scald victims were injured by hot cooking liquids; hot food accounted for 16, or 25%, of these victims. Two (2) victims, or 3% were scalded by unspecified cooking activities; and one, or 2%, was scalded by steam from cooking.

Thirteen (13), or 15%, of all cooking-related burns were flame burn injuries. Six, or 46% of the cooking-related flame burn victims, were burned when their clothing ignited while cooking.

Three (3) victims received their burns from coming into contact with barbeques, causing 33% of these burns. An oven and an unspecified cooking act were each responsible for one, or 8% of flame burns involving cooking. Four victims, or 5%, received their cooking-related burn injuries from coming into contact with hot items. Two victims, or 50% of all cooking-related contact burns, received their injuries by coming into contact with stoves; the other two victims, or 50%, had unspecified cooking activity injuries.

Four (4) cooking-related burn injuries were caused by fires, accounting for 5% of these types of injuries. Two (2) injuries in house fires, caused 50%, of cooking-related fire injuries; one victim, or 25% of these injuries, was caused by a brush fire, and the other cooking-related fire burn victim accounted for 25% of these types of injuries.

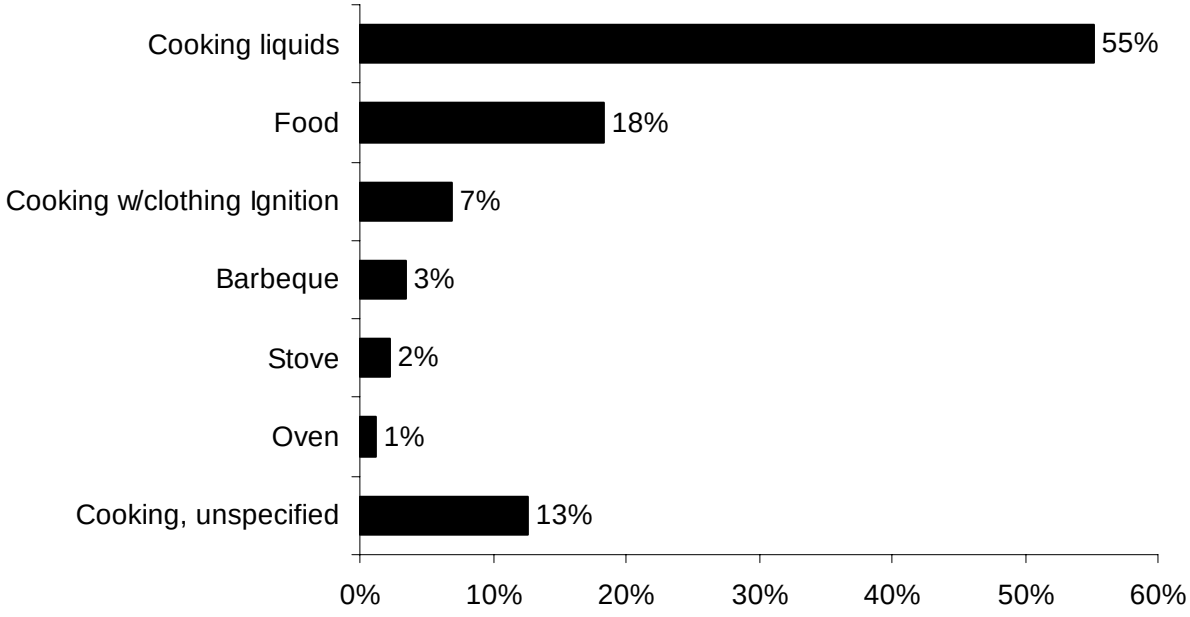
Two (2) victims received burn injuries in cooking-related explosions, accounting for 2% of cooking burn injuries in 2006. One (1) injury in a house fire caused by clothing ignition while cooking accounting for 1% of the cooking-related burn victims.

Cooking Liquids Were the Leading Cause of Cooking-Related Burns

Burns from cooking liquids were the leading cause of all cooking-related burns in Massachusetts in 2006. These burns accounted for 48, or 55%, of all cooking-related burn injuries. Scalds from hot food were the second leading cause of cooking-related injuries. They caused 16, or 18%, of these injuries. Clothing ignitions while cooking were the third leading cause of cooking-related injuries, causing six, or 7%. Burns received while barbequing accounted for three, or 3%, of all cooking burn injuries. Burn injuries from coming into contact with a hot stove in 2006 accounted for two, or 2%, of these injuries. Burns from conventional ovens caused one, or 1% of these burns; and unspecified cooking activities caused 11, or 13%, of the cooking burns in the Commonwealth in 2006.

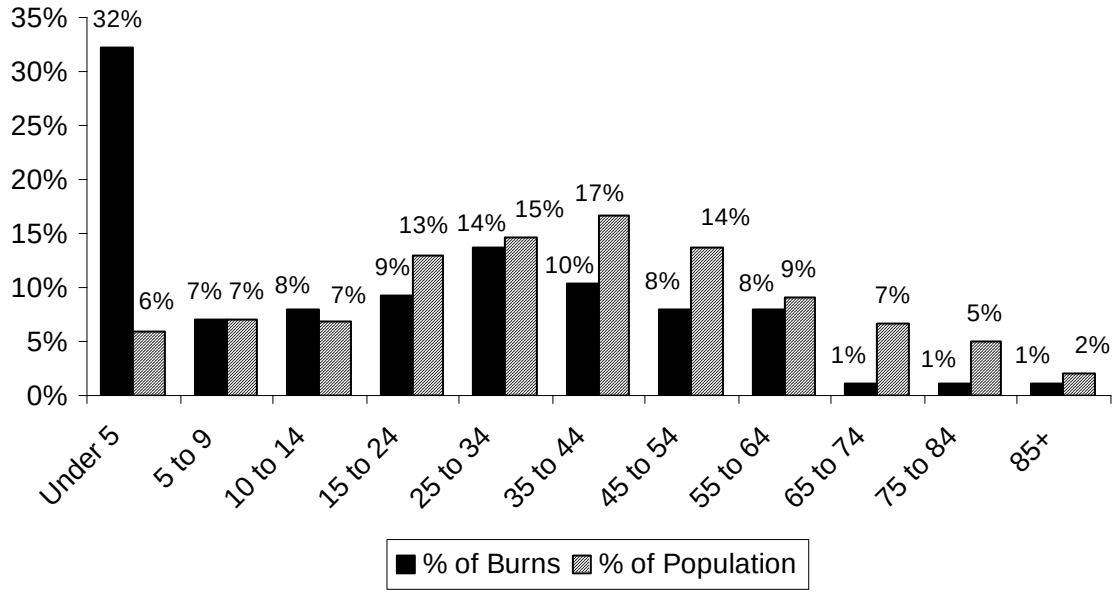
The following graph shows the leading causes of cooking related burn injuries in Massachusetts in 2006 regardless of the type of burn.

Leading Causes of Cooking Burn Injuries



Children Under 5 Were 5.4 Times as Likely to be Burned by Cooking Activities
Twenty-eight (28), or 32%, of the cooking-related burn victims were under age five. This age group was slightly more than five times as likely to be burned by cooking related activities. Six (6), or 7%, were aged between five and nine years of age; seven, or 8%, were between 10 and 14; eight, or 9%, were between 15 and 24 years old; 12, or 14%, were between 25 and 34; nine, or 10%, were between 35 and 44; seven, or 8%, were between 45 and 54; another seven, or 8%,

Cooking Burn Injuries by Age Group



were between 55 and 64; one victim, or 1%, was between 65 and 74; another victim, or 1%, of the victims belong to the age group between 75 and 84 years of age, and one, or 1%, of the victims were over the age of 85 in 2006. The youngest victim of a cooking-related burn was a one-month old girl, while the oldest victim was an 87-year old woman who received her burn injuries from a clothing ignition while cooking.

The cause of burns varied with age. Pre-schoolers generally do not cook. They do, however, grab pot handles and sometimes get underfoot when adults are cooking. Cooking liquids or cooking grease frequently scalds them. Parents should keep young children away from the stove and food preparation areas while adults are cooking.

Older Adults at Risk for Cooking-Related Burn Injuries

In the past, older adults over the age of 65 were usually more likely to be burned while cooking. However in 2006, three older adults received burn injuries as a result of cooking in 2006. They represented 3% of the cooking burn injuries and 14% of the population and so were not injured by cooking at a disproportionate rate. Two (2), or 67%, of these victims were women and one, or 33%, was a man. One of these older adults, a woman had her clothing ignite while she was cooking; another one of the older adults was scalded by cooking liquids; and the third older adult was scalded by hot food.

Clothing Ignitions while Cooking

In 2006, six, or 7% of the victims with cooking-related burns, were injured when their clothing ignited while cooking. Five (5), or 83%, of the victims of clothing ignitions while cooking were women and one, or 17% was a man. Only one, or 17% of these clothing ignitions while cooking, was 65 years old or older. Loose-fitting sleeves can come into contact with burners and catch fire.

According to data collected by the Massachusetts Fire Incident Reporting System, unattended and other unsafe cooking practices caused 7,323 fires in 2005. These fires killed three civilians and caused 90 civilian injuries and 26 fire service injuries along with $7.1 million in losses. Many of these people also suffered from smoke inhalation.

Serious Burns from Cooking

- On April 2, 2006 a 43-year old Chicopee man received flame burns to his face while barbequing.
- On April 26, 2006, a 37-year old homeless man received burn injuries to his upper and lower extremities when the fire he was using to cook his meal started a brush fire.
- On May 13, 2006 a 14-year old Marion girl burned both her arms and hands in a cooking fire in her own kitchen.
- On May 25, 2006, a 41-year old Revere man received flame burns to his face and chest from a flash burn from his gas oven.

Safety Measures

- ✓ Never leave cooking food unattended.
- ✓ Keep children at a safe distance from all hot items by using playpens, high chairs, etc.

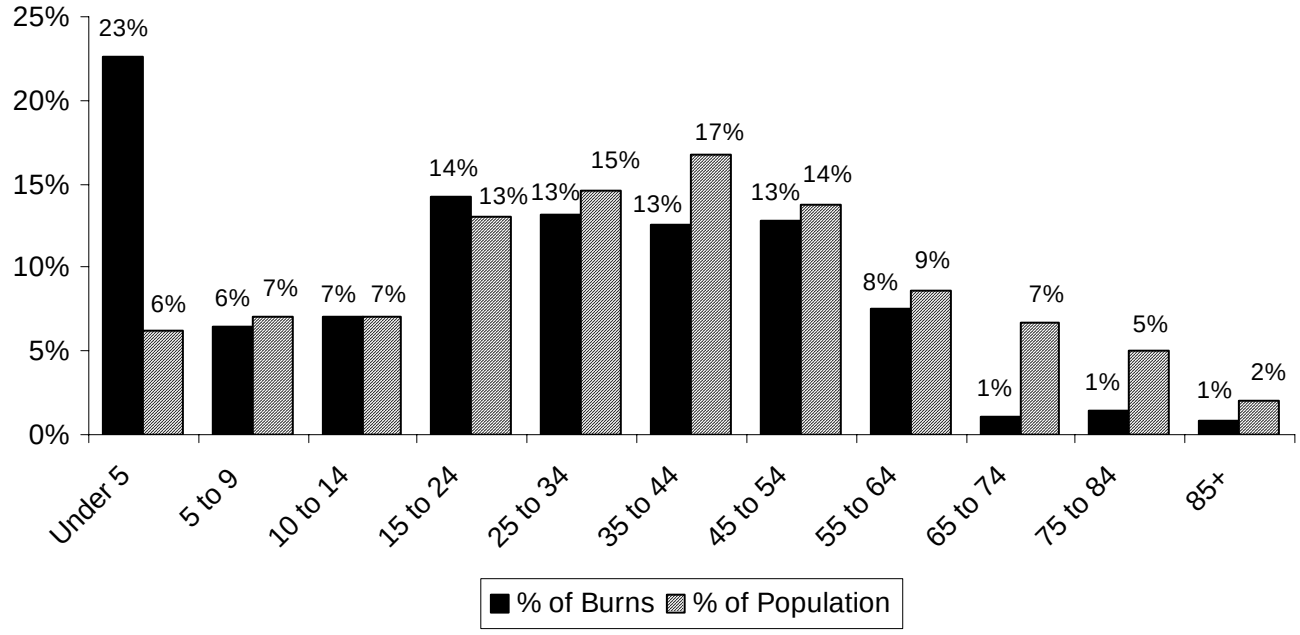
- ✓ Create and enforce a **NO** zone around the stove. Do not let children play around the stove or barbeque.
- ✓ Test all heated food before giving it to young children.
- ✓ Keep pot handles turned in over the stove or countertop.
- ✓ Always use oven mitts or potholders.
- ✓ Secure loose sleeves or wear short sleeves while cooking.
- ✓ Keep a large pot lid handy to put out stovetop fires.
- ✓ Never use water on a stovetop grease fire.
- ✓ Read and follow directions when using microwave ovens and other cooking appliances.
- ✓ Children should not be allowed to use cooking or heating appliances until they are mature enough to understand safe-use procedures and tall enough to safely handle items and reach cooking surfaces.
- ✓ If cabinets exist over cooking surfaces use them to store only items that will not be needed during cooking.
- ✓ When barbequing, use only charcoal lighter fluid to start a fire. Once the coals have been ignited, never add more charcoal lighter fuel to the fire; the container may explode in your hand.
- ✓ Dispose of used coals in a proper metal container away from the house or porch.

Burn Injuries by Age Group

One age group, the extremely young were the only part of our population that was at a greater risk of getting a burn injury. Although burn injuries were reported in all age groups, very young children suffer more than their share and are greater than three times more likely to be burned. In 2006, older adults over the age of 65 did not get burned at a disproportionate rate compared to their share of the total population; however their burns tended to be larger or more severe.

Twenty-three percent (23%) of all burn victims were children under the age of five. Eighty-one (81) children under age five were seriously burned in 2006. Twenty-three (23), or 6% of the burn injuries, occurred to children aged five to nine; 26, or 7%, were youths aged 10 to 14. Fifty-one (51), or 14% of the burn victims, were young adults aged 15 to 24. Forty-seven (47), or 13% of the 2006 burn victims were adults aged 25 to 34. Forty-five (45), or 13%, were people aged 35 to 44. Forty-six (46), or 13% of the burn injuries, occurred to adults aged 45 to 54; 27, or 8% of people who were reported to have incurred burns were between 55 and 64; four, or 1% of all burn victims, were older adults in the 65 to 74 age group; five, or 1% were in the 75 to 84 year old age group; and three adults over the age of 85, or 1% of all reported burn victims in 2006, received burns of more than 5% of their body surface area.

Burn Injuries by Age Group



Children Under 5 At Highest Risk of Burn Injuries
The above graph compares the percentage of burn injuries incurred by each age group with the percentage of that age group in the general population. Only 6% of the population in Massachusetts is under the age of five (source: 2000 U.S. Census data). We would expect therefore that children under five would account for a maximum of 6% of the burn injuries. In fact, they accounted for 23% of the reported burn injuries in 2006, making them over three and a half times more likely to suffer burn injuries. Children of this age group are the most dependent on others to protect them and are the least able to move out of harm's way unassisted.

The threat of burns is most severe for children less than two-years old. Forty-four (44) babies and toddlers under the age of two, accounted for 12% of all burn victims, but all children under the age of five accounted for 6% of the Massachusetts population.

While scalds remain the leading cause of burn injuries overall, for the first time, scalds are not the leading cause of burn injuries for the majority of age groups. Burn injuries from fire were the leading cause for five age groups 10 to 14, 15 to 24, 25 to 34 (tied with Scalds), 35 to 44 and 55 to 64. Scalds were the leading cause of burn injuries in the age groups of children under five, children between the ages of five and nine, adults between the ages of 25 and 34 (tied with fire burn injuries) and older adults between 65 and 74. Flame burns were the leading cause of burn injuries for adults 45 to 54 and older adults over the age of 85. There were four different types of burn injuries to older adults in the age group 75 to 84; there was a flame burn, a scald burn, a burn from fire and a chemical burn.

To learn more about the specific causes for each age group, please look at the age specific sections within *Burn Injuries by Age Group*.

Causes of Burn Injuries by Age and Gender

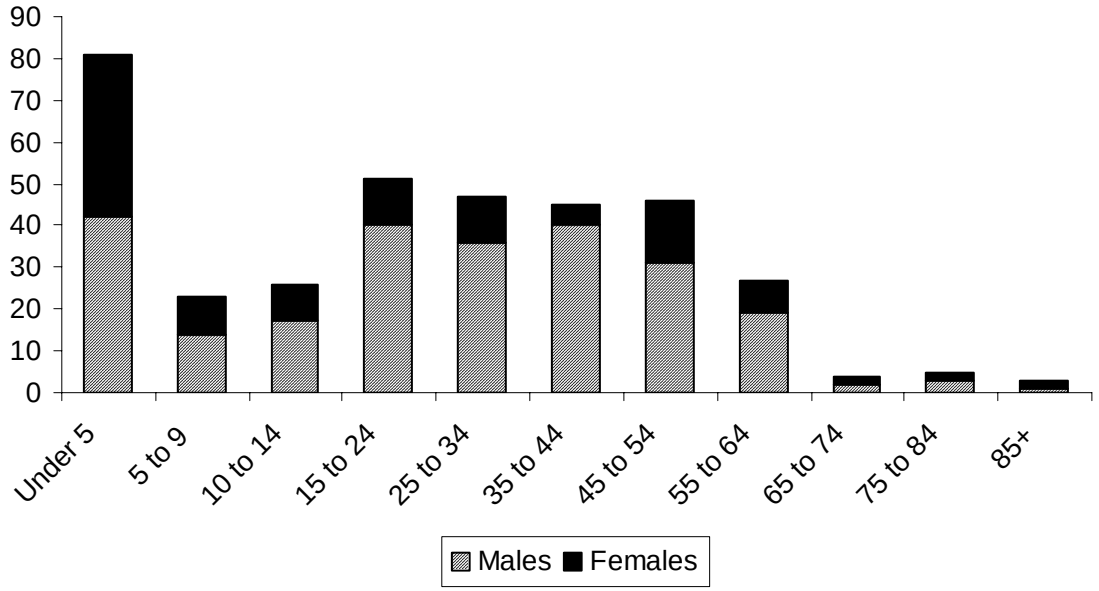
The leading causes of burn injuries vary widely between age groups depending on the nature of activities in which people are involved. Children under five are busy exploring their environment and reaching for anything in their grasp. Twenty-four percent (24%) of the burns incurred by these young children were scalds caused by hot beverages and 20% were caused by scalds from hot tap water. Cooking liquids scalds, gasoline and other ignitable liquids were frequent causes of burn injuries to older teens and young adults.

Parents of young children must be educated about the danger of scalds from hot beverages, cooking liquids and tap water. Teens and young adults need information about cooking safely, procedures to follow when a car overheats and the correct uses of gasoline. To be effective, burn prevention educators must develop strategies that address the risk faced by each age group.

Except for the age group 65 to 74 where two men and two women were burned, up until 85 years of age, males were burned more frequently than females. In the age group over 85, two women and one man were burned. In 2006, 245, or 68%, of the 358 burn victims were male, and 113, or 32%, were female.

Burns by Gender

Burn Victims by Age and Gender



Children Under 5

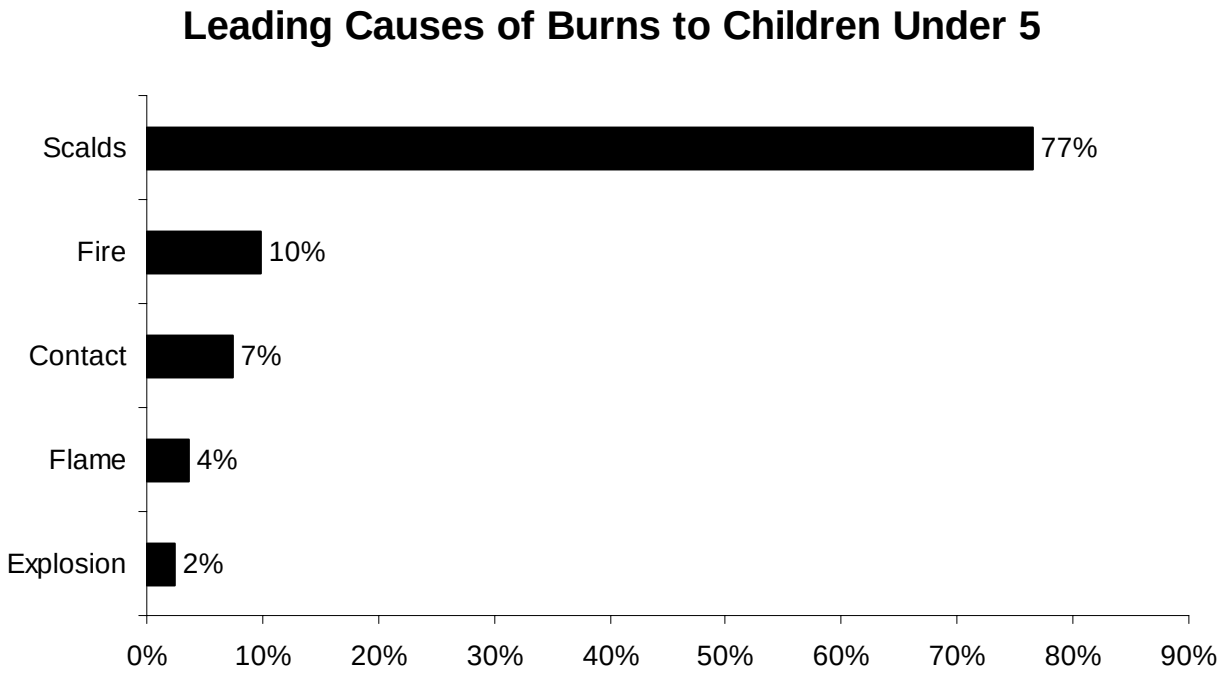
Almost 1/4 of Reported Burns Incurred by Children Under 5
Eighty-one (81), or 23%, of the burn injuries reported to M-BIRS in 2006 were incurred by children under five years old. According to the 2000 U.S. Census, only 6% of Massachusetts residents are under the age of five. Children under five were greater than three times as likely to be burned, as were members of the general population. No other age group faced a risk this high. Fifty-two percent (52%) of burned pre-schoolers were male and 48% were female.

Scalds Caused Over 3/4 of Burns to Pre-Schoolers
Scalds caused 62, or 77%, of the burn injuries incurred by children under five. Twenty-six (26) were from cooking activities; 16 were from cooking liquids and 10 burns were from hot food. Nineteen (19) were from hot beverages; 16 were from hot tap water; and one scald burn was from an appliance.

Fires caused eight, or 10%, of the injuries to this age group. Five (5) children were burned in house fires; two children were burned in camp fires; and one child was burned in a car fire.

Contact burns accounted for six, or 7%, of the injuries to children under the age of five. Three (3) children were burned by heating equipment; two from touching a woodstove and one by coming into contact with an unspecified heater. Contact with a hot piece of metal, a stove and an unspecified item each caused one burn injury to this age group.

Flame burns caused three, or 4%, of burns to this age group. A candle, a child playing with a lighter and child's clothing ignited when he was too close to someone cooking each caused one of these burn injuries.



Burn injuries from explosions caused 2% of the burn injuries to children under five in 2006. An electrical explosion and an unspecified explosion each caused one of these injuries.

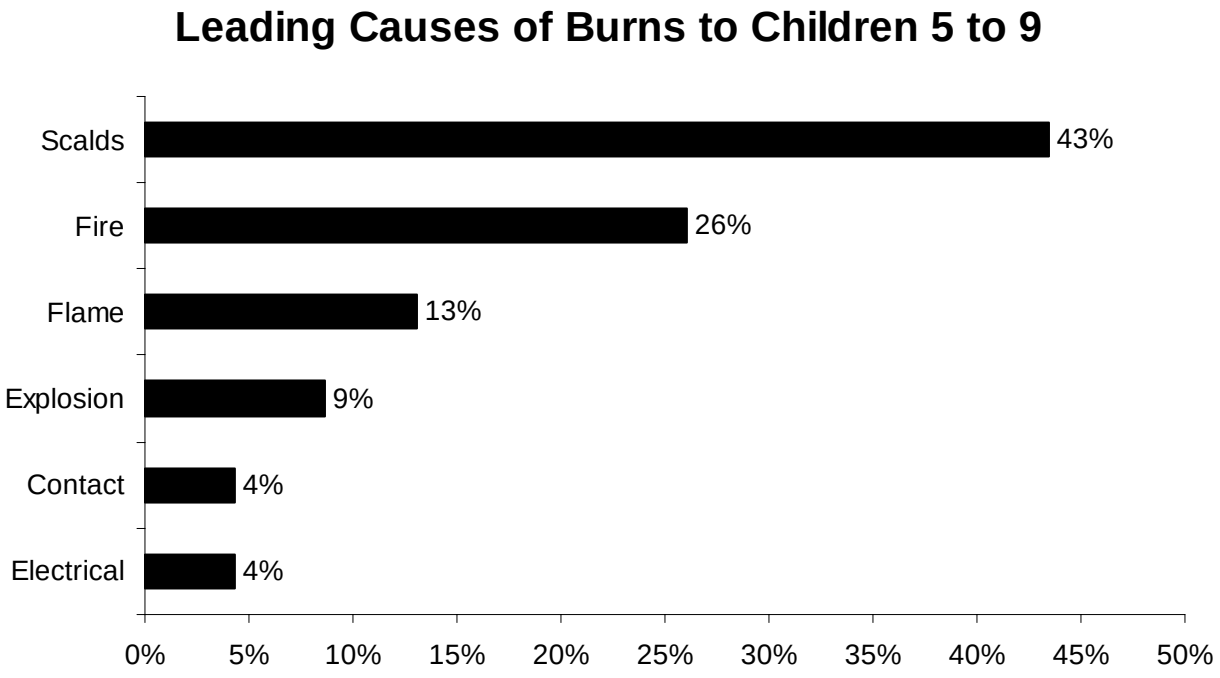
Children Ages 5 to 9

6% of Reported Burn Injuries Incurred by Children 5-9
Twenty-three (23), or 6%, of the burn injuries reported in 2006 were incurred by children between five and nine years of age. Fourteen (14), or 61%, of the burn victims were male, and nine, or 39%, were female. Children in this age bracket accounted for 7% of the population of Massachusetts and 6% of the burn injuries in 2006.

Scald Burns Caused 43% of All Burns to Children 5-9
The leading causes of burn injuries to children aged five to nine were scalds, fires, flame burns, explosions, contact burns, and electrical burns

Scalds caused 10, or 43%, of the burn injuries incurred by children aged five to nine in 2006. The scald burn injuries included five from cooking activities; four from cooking liquids and one from hot food. Three of these burns were from hot tap water, one was from an assault and the other from a hot beverage.

Fires accounted for six burn injuries to this age group. Five house fires and a brush fire accounted for six, or 26%, of the burn injuries to children between the ages of five and nine.



In 2006, flame burns accounted for three, or 13%, of the burn injuries to this age group. A candle, an unspecified clothing ignition, and gasoline were each the cause of one flame burn injury to this age group.

Contact with a hot piece of unspecified cooking equipment caused one, or 4%, of these burns. One child between the ages of five and nine was electrocuted and represented 4% of the burn injuries to this age group.

Children Ages 10 to 14

7% of Reported Burns Incurred by Children 10-14
Children between the ages of 10 and 14 suffered 26, or 7%, of the burn injuries reported in 2006. Seventeen (17), or 65%, were male and nine, or 35%, were female. Children in this age bracket accounted for 7% of the population in the Commonwealth of Massachusetts and 7% of the total reported burn injuries. At this age, children are exploring their environment more on their own, but often without the maturity or experience to reason out cause and effect.

Burns From Fire Were the Leading Cause of Burns to Children 10-14
Eight (8), or 31%, of the burn injuries to this age group were due to fires; three pre-teens were injured in house fires. Two of the children's clothing ignited from bonfires; two more were injured in car fires; and one pre-teen was injured in a brush fire involving gasoline.

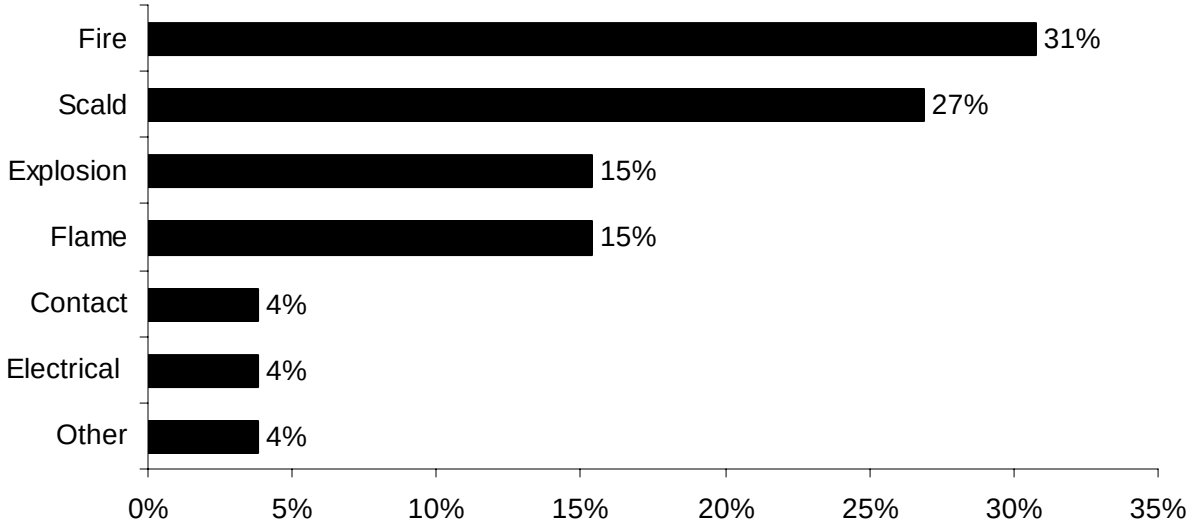
Scalds represented seven, or 27%, of the burns incurred by children aged 10 to 14. Four (4) were scalded by cooking liquids, two were scalded by hot beverages, and one by hot tap water.

Explosions caused four, or 15%, of the 26 burn injuries to children ages 10 to 14. Three (3) children were burned when the aerosol can they were playing with exploded. Another child was injured when an unspecified heater exploded.

Another four pre-teens, or 15%, were injured by flame burn injuries. Clothing ignitions while cooking caused two of these injuries; and alcohol and gasoline each caused one of these injuries. In 2005, flame burns were the leading cause of burn injuries to this age group.

Contact with a hot piece of metal accounted for one, or 4%, of the burn injuries to this age group. An electrical burn from an energized piece of metal and a chemical burn each also accounted for one, or 4%, of the burn injuries to this age group.

Leading Causes of Burns to Children Ages 10 to 14



Gasoline & Aerosol Cans Caused Over 1/4 of Pre-teen Burns
Overall, gasoline and aerosol cans were a factor in seven, or 27%, of the burn injuries to pre-teens; these included three explosions, two house fires, one brush fire and a flame burn injury. Gasoline was involved in four, or 15%, of these injuries; and aerosol cans were a factor in three, or 12%, of these injuries.

Ages 15 to 24

14% of Reported Burn Victims Between 15-24
Teens and young adults between the ages of 15 and 24 incurred 51, or 14%, of the burn injuries reported in 2006. Forty (40), or 78%, were male and eleven, or 22%, were female. Young adults aged 15 to 24 account for 13% of the population of Massachusetts and 14% of the burn injuries in 2006. Seven (7), or 14%, of the burn injuries incurred by this age group were work-related, all seven were male.

29% of Burns Were From Fires
Burns from fire were once again the leading cause of burn injuries to this age group. Twenty-nine percent (29%), or 15, of the burn injuries incurred by people aged 15 to 24 were from fires. Eleven (11) victims received burns from camp or bonfires, two from motor vehicle fires, one from a house fire, and one young adult received a burn from a brush fire.

Fourteen (14), or 27%, of the burn injuries to this age group were caused by flames. Ignitable liquids caused six burn injuries; two of these six were involved gasoline and the other an

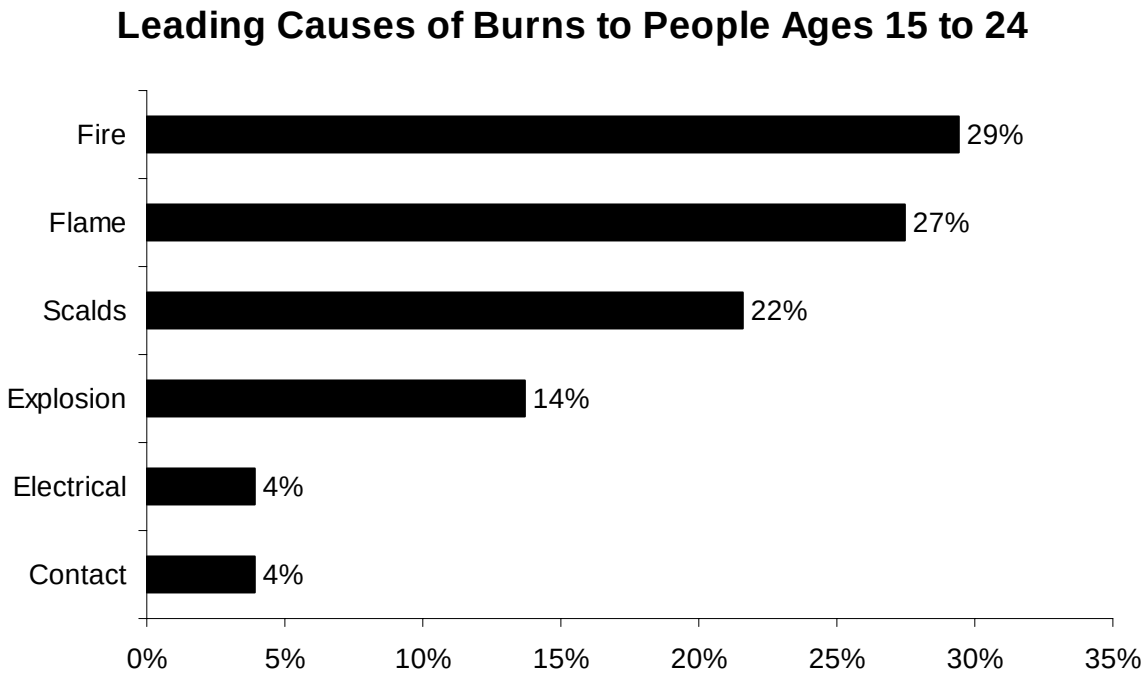
ignitable liquid. Cutting and welding torches caused two burn injuries to this age group; one from a cutting torch, the other from a welding torch. Flame burns from cooking also caused two of these injuries; one from a gas barbeque grill and the other from cooking liquids. Smoking caused two flame burn injuries; one from a cigarette and the other from an unspecified smoking act. Burns from alcohol, an assault, a fireplace, fireworks, and a flammable material each accounted for one injury.

Eleven (11), or 22%, of the burn injuries to people 15 to 24 years of age were caused by scalds. Six (6) were caused by cooking activities; three from cooking liquids, two from hot food and one from an unspecified cooking act. Car radiator scalds caused three of these burns. The other two injuries were from hot tap water and steam.

Explosions injured seven, or 14%, of people in this age category. An explosion involving fireworks caused two burn injuries to this age group. Ignitable liquids caused two burn injuries, one from gasoline and one from another ignitable liquid. Heating equipment also caused two of these injuries; one from a boiler and the other from an unspecified heating unit. A motor vehicle accident caused one explosion burn injury.

There were two contact burn injuries accounting for 4% of the injuries to this age group. Contact with lava and hot wax each caused one burn injury to this age group.

There were two burn injuries caused by electrocutions, accounting for 4% of the burn injuries to people between the ages of 15 and 24.



Ages 25 to 34

13% of Burn Victims Were Between 25 and 34
Forty-seven (47), or 13%, of the burn injuries reported in 2006 were incurred by people between 25 and 34 years of age. Thirty-six (36), or 77%, of the victims were male and 11, or 23%, were female. Fifteen (15), or 32%, of the burn injuries suffered by this age group were work-related; 13 were men and two were women. People between the ages of 25 and 34 accounted for 15% of the population of Massachusetts while accounting for 13% of the total number of burn injuries reported in 2006.

Fires & Scalds Each Caused Over 1/4 of Burn Injuries
Scalds and fires each caused over one-quarter of the burns in this age group,

Scalds accounted for 13 burns, or 28%. Seven of the scalds were from cooking liquids, two were from hot tap water, another two were from steam, one was from a pipe and one was from a car radiator.

Burns from fires tied with scalds as the leading cause of burns to people between the ages of 25 and 34. Thirteen (13) burns from fires accounted for 28% of the burn injuries to this age group. These fire-related burns included four victims of motor vehicle fires, three victims of brush fires, two victims of camp or bonfires, one victim of a house fire, one victim of a structure fire, and two victims of unspecified fires.

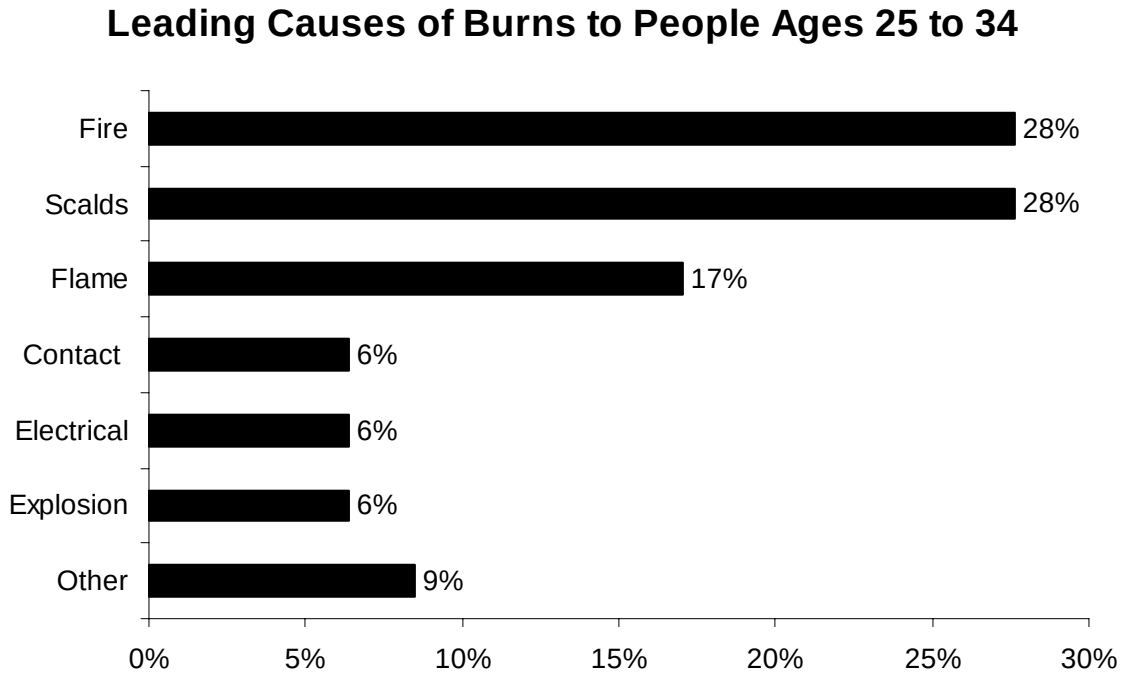
Flame burns caused eight, or 17%, of the injuries to 25-34 year olds. Two people were victims of assaults, while another two victims' burn injuries involved ignitable liquids. A cutting torch, a clothing ignition while cooking, an unspecified smoking act, and an unspecified burn each caused one flame burn injury to someone in this age group.

Contact burns accounted for three, or 6% of the burns to this age group. Cooking activities caused two of these burns; one injury was caused by contact with a hot stove and the other was an unspecified cooking act. A heating pad caused the other contact burn injury to people between the ages of 25 and 34.

Electrical burns caused three, or 6%, of the burn injuries to this age group. Two victims were electrocuted and the other burn injury was from an unspecified electrical incident.

Another three, or 6%, of the burns to 25 to 34 year olds were caused by explosions. Gasoline, propane and cooking were each involved in one explosion.

Other type burns caused four, or 9%, of the burn injuries to this age group. Two (2) chemical burns, a sunburn and a burn from a UV lamp caused burns to adults between the ages of 25 and 34.



Ages 35 to 44

13% of Reported Burn Victims Were Between 35 and 44 Years of Age
Forty-five (45), or 13%, of the burn injuries reported in 2006 occurred to people between the ages of 35 and 44. Forty (40), or 89%, of the victims were men and five, or 11%, of the victims were women. Adults between the ages of 35 and 44 accounted for 17% of the Massachusetts population but only 13% of the reported burns in 2006.

Almost 1/4 of Burn Injuries Were Work-Related
Ten (10), or 22%, of the burn injuries incurred by this age group were work-related. All 10 of these work-related burn victims were men.

38% of Burn Injuries Were Caused by Fires
In 2006 burn injuries from fires were the leading cause of burns to people between 35 and 44 years of age, accounting for 17, or 38%, of burn injuries to this age group. Eight were from house fires, three were from brush fires, three were from camp or bonfires, one was from a structure fire, and two were from unspecified fires, one involving gasoline the other cooking.

Flame burns caused 11, or 24%, of burn injuries to adults between the ages of 35 and 44. Ignitable liquids caused four burns; three involved gasoline, the other involved another ignitable liquid. Two of these injuries involved smoking; and another two involved cooking activities, one involved a gas barbeque grill and the other an oven. Explosives, a flashburn and welding each caused one flame burn injury in this age group.

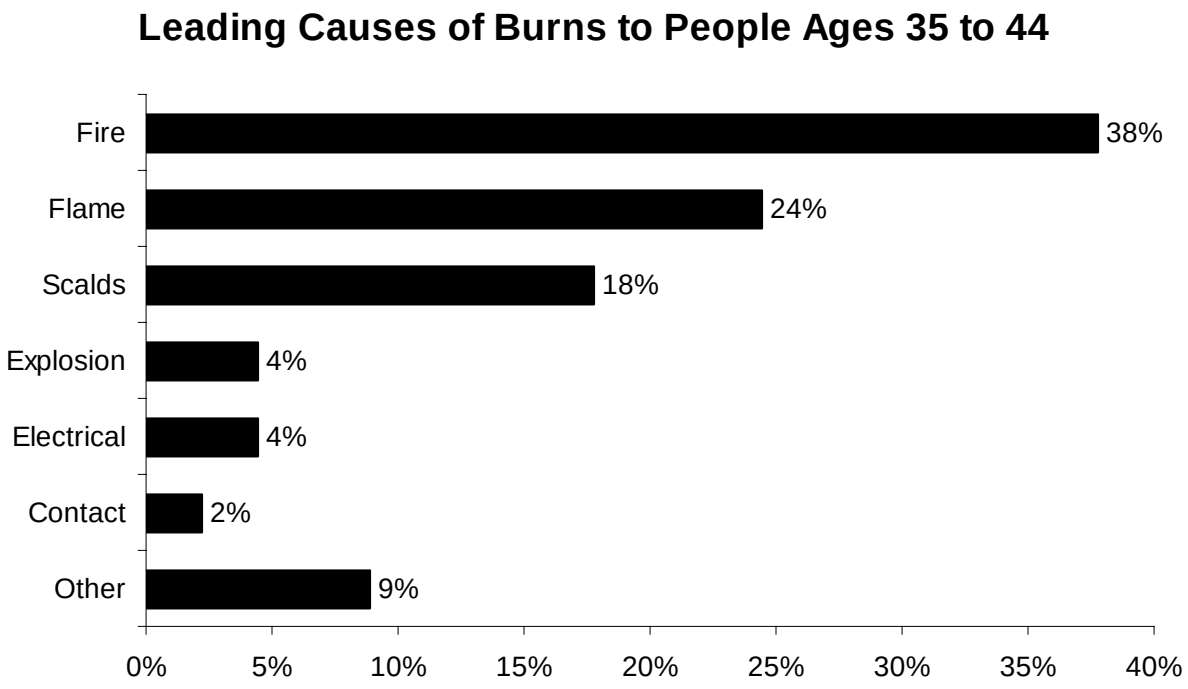
In 2005, scalds were the leading cause of burn injuries to this age group. This year, scalds were the third leading cause of burn injuries to individuals between the ages of 35 and 44. Scalds caused eight, or 18%, of the burn injuries to this age group. Four (4) of these injuries were from cooking liquids, two were from hot tap water, one was from a hot beverage and the other was from a car radiator.

Explosions accounted for two, or 4%, of the total burn injuries to this age group. A cooking act and propane were each responsible for one of these burns.

Electrical burns also accounted for two, or 4%, of these burn injuries. One victim was burned by an electrical flashburn and the other was the victim of an unspecified electrical accident.

Contact burns accounted for one, or 2%, of the burns to this group. Contact with a hot radiator was the cause of this burn.

Other burns accounted for four, or 9% of the injuries to people between the ages of 35 to 44. Three (3) chemical burns and a sunburn accounted for these four burns.



Ages 45 to 54

13% of Reported Burn Injuries Were Between 45 and 54 Years of Age
People between the ages of 45 and 54 incurred 46, or 13%, of the reported burns in 2006. Thirty-one (31) or 67%, of the victims were male, and 15, or 33%, were female. Eight (8) of the

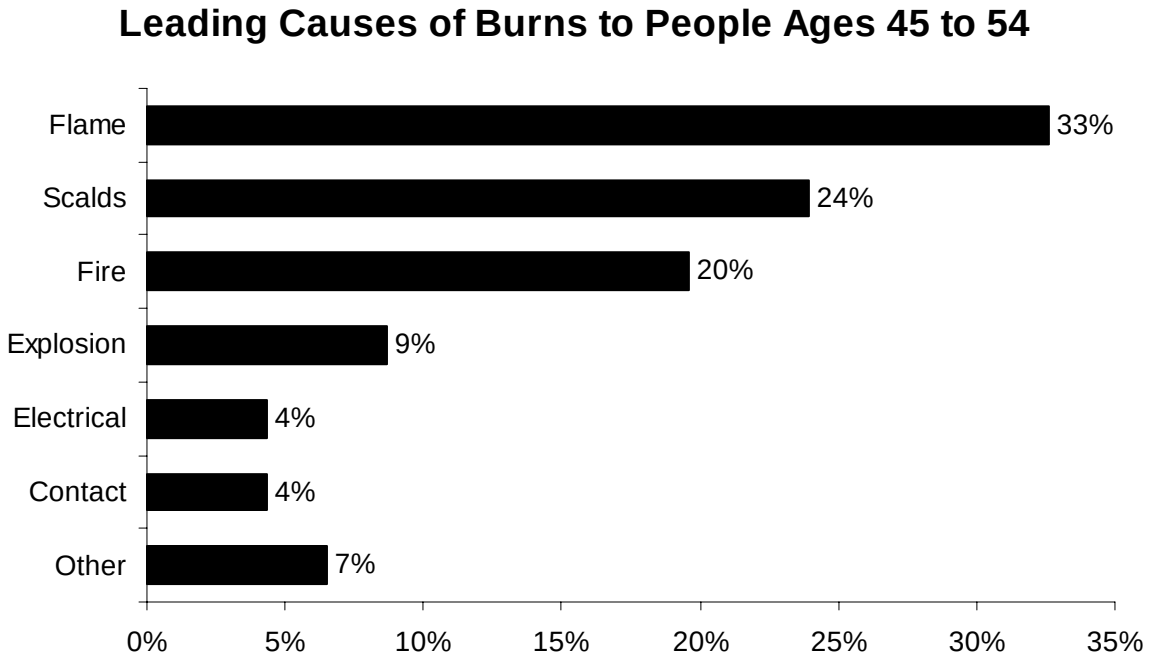
46 burn victims aged 45 to 54, or 17%, were burned while at work; six of these were men and two were women. This age group represents 14% of the population of Massachusetts while it received 13% of the burn injuries in 2006.

Flame Burns Caused 1/3 of the Burn Injuries
Flame burns were incurred by 15, or 33%, of the burn victims between the ages of 45 and 54. Smoking caused four of these injuries; two were from smoking on oxygen, one was from smoking in bed, and the other was from a lighter. Cooking caused three of these flame burn injuries; one was from a gas barbeque, one was from cooking liquids and another was a clothing ignition while cooking. Heating equipment also caused three of these injuries; one by and unspecified heater, one from a boiler and one burn was caused by a woodstove. An assault, a candle, an ignitable liquid, natural gas, and welding were each responsible for one flame burn injury to this age group.

Scalds caused 11, or 24% of the burn injuries to this age group. Cooking activities were responsible for four of these burns; three involved cooking liquids, and one involved hot food. Two of these injuries were caused by car radiators and two more were caused by hot tap water. An assault, a hot beverage, and steam each caused one of these burns.

Burns from fires caused nine, or 20%, of the burn injuries to victims 45 to 54 years old. Three (3) burns were caused by house fires, another three were caused by structure fires, two car fires and a brush fire accounted for nine of the burn injuries to this age group.

Four (4) members of this age group were victims of explosions. They accounted for 9% of the burn injuries to this age group. Ignitable gases caused two of these explosion burn injuries; one was caused by natural gas and the other by propane. An aerosol can and gasoline each caused one of these burn injuries.



Contact burns caused two, or 4%, of the burns to victims between the ages of 45 to 54. Asphalt and a woodstove each caused one of these contact burns.

Electrical burns were responsible for another two, or 4%, of the burns to this age group. One victim was electrocuted, and the other person was burned in an unspecified electrical accident.

Three (3) chemical burns caused 7% of the burn injuries to people in the age group 45 to 54 in 2006.

Ages 55 to 64

7% of Burn Victims Were Between 55 and 64 Years Old
Twenty-seven (27), or 8%, of the burns reported in 2006 were incurred by people between the ages of 55 and 64. Nineteen (19), or 70%, of the victims were male, and eight, or 30% were female. Six (6), or 22%, of the 27 burn injuries incurred by people between 55 and 64 years old were reported to be work-related, five of these victims were men and one was a woman. People of this age group represent 9% of the total population of Massachusetts but only received 8% of the burns in 2006.

1/3 of Burn Injuries Were From Fires
Burns from fires were the leading cause of burn injuries to adults between the ages of 55 and 64 years of age in 2006. Fires caused nine burn injuries, or 33% of all burn injuries to this age group. Seven (7) of these injuries were incurred in house fires, one was caused by a brush fire, and one from a structure fire.

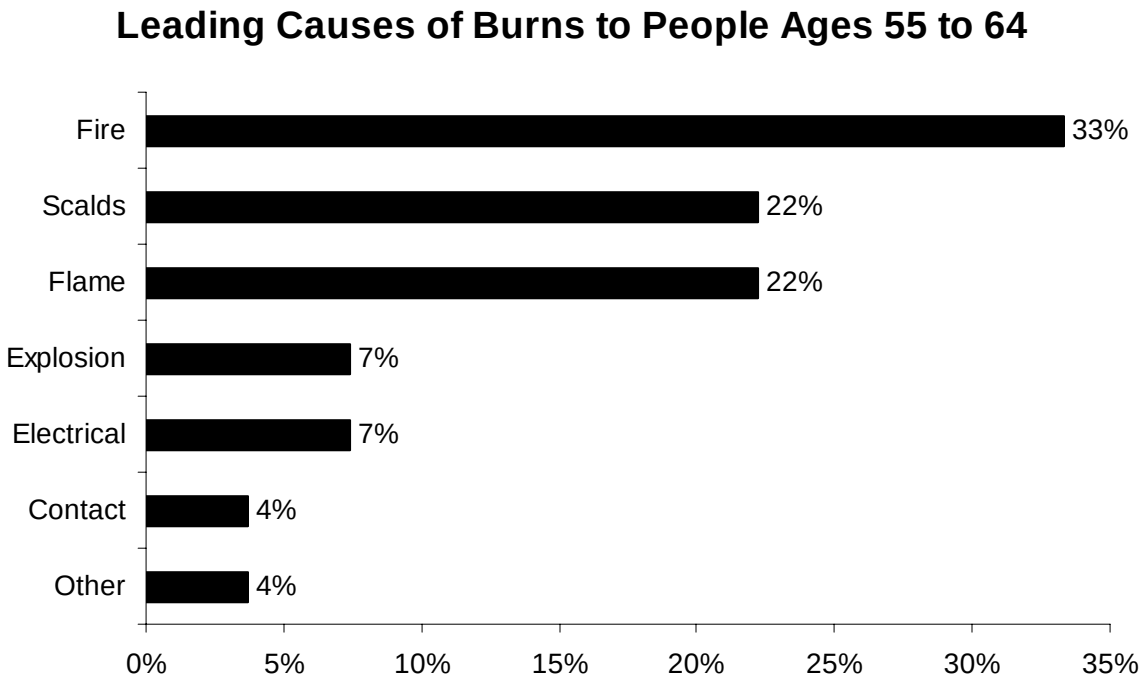
Scalds tied as the second leading cause of burn injuries to this age group. Six (6), or 22%, of the burn injuries incurred by people between the ages of 55 and 64 were scalds. These scald burns included five from cooking activities; three from cooking liquids, one from hot food and one from an unspecified cooking act. Hot tap water accounted for the other scald burn to this age group.

Flame burns also accounted for six (6), or 22%, of the injuries to this age group. Smoking caused two of these injuries; one victim was smoking in bed and the other injury was from an unspecified smoking act. A candle, an unspecified cooking act, propane, and a woodstove each caused one flame burn injury to someone in this age group.

Two victims, or 7%, belonging to this age group received their burn injuries through explosions. Gasoline and a cutting torch each accounted for one of these injuries.

Electrical burns also caused two, or 7%, of these burn injuries. One person was the victim of an electrocution and the other injury was caused by an unspecified electrical accident.

One victim was burned when he was partially buried with hot asphalt causing 4% of these burns. In 2006 one chemical burn caused 4% of the injuries to older adults between the ages of 55 and 64.



Over 65

Only 12 Burn Victims Over 65
Twelve (12), or 3%, of the burn victims in 2006 were over 65 years old. Four (4) were between 65 and 74; five were between 75 and 84; and three were 85 years old or older. Six (6), or 50% of the victims were male, and six, or 50%, were female. Older adults represent 14% of the total Massachusetts population but only 3% of the burn injuries in 2006.

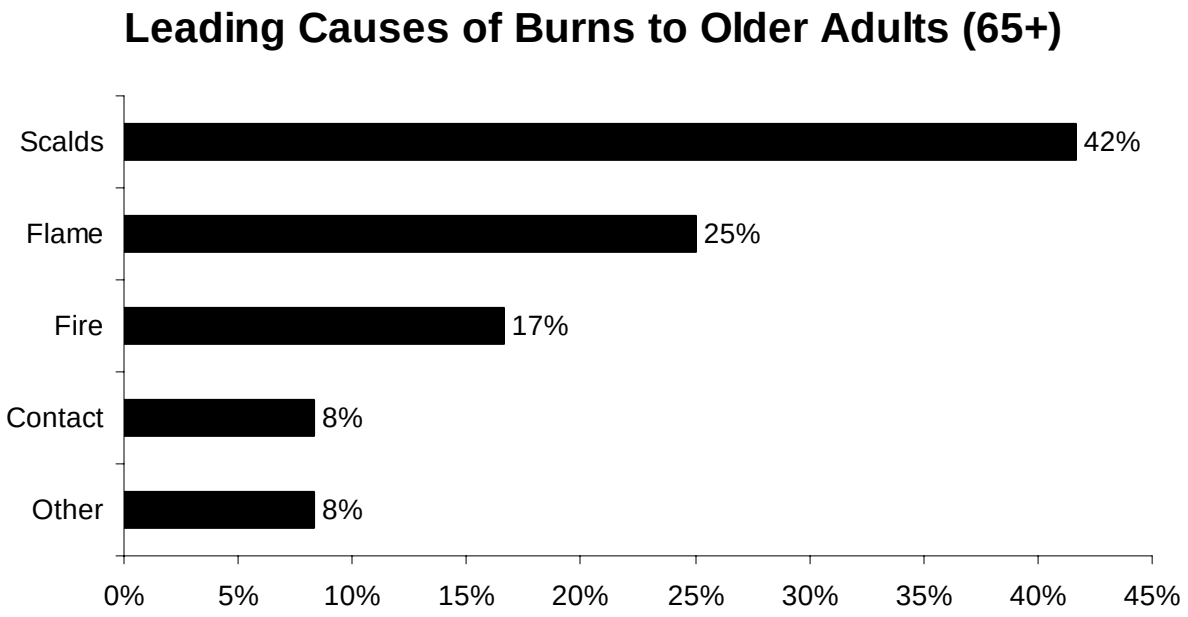
Historically older adults usually account for 7% of the total number of burn injuries during the year. Since 1984 there have been 11,391 reported burn injuries to M-BIRS, 797 have been incurred by people over the age of 65. In 2001, they accounted for 11% of the total number of burn injuries, the highest percentage of any year since the inception of M-BIRS in 1984. In 2006 older adults accounted for the smallest percentage of total burn injuries since 1984, 3%.

Scalds Were the Leading Cause of Burns to Older Adults
Five, or 42%, of the burns to older adults were caused by scalds. Two (2) were from cooking activities; one was from cooking liquids and the other was from hot food. Hot beverages, hot tap water, and steam were each responsible for one of the burn injuries to this age group.

In 2005, flame burn injuries were the leading cause of burns to older adults. In 2006, three, or 25%, of the burn injuries to people over the age of 65 were attributed to flame burns. A candle, a clothing ignition while cooking and smoking while on oxygen each caused one flame burn injury to this age group.

Burns from fires caused two or 17%, of burn injuries to adults over the age of 65. Both of these burn injuries were caused by house fires.

Contact with a woodstove and a chemical burn each caused one, or 8%, of the burn injuries to older adults in 2006.



According to the Burn Awareness Coalition, the following scenarios increase your chance of a burn injury; smoking when tired, drinking alcohol or taking medications which can cause drowsiness, wearing loose fitting clothing while cooking, kitchen fires from unattended cooking, and grease fires on the stove top are leading causes of burn injuries to older adults. During 2006, cooking accounted for three, or 25% of the reported burn injuries in Massachusetts incurred by older adults. Clothing ignitions caused 17% and smoking accounted for 8% of the burn injuries to older adults.

Clothing Ignitions Cause 23% of Burns to Older Adults

Clothing ignitions to older adults has consistently been an issue, but this trend is on a decline. During 2006, only two, or 17%, of the burn injuries to those victims over the age of 65 were due to clothing ignitions. These types of injuries accounted for 5% of the total 358 burn injuries reported in Massachusetts in 2006.

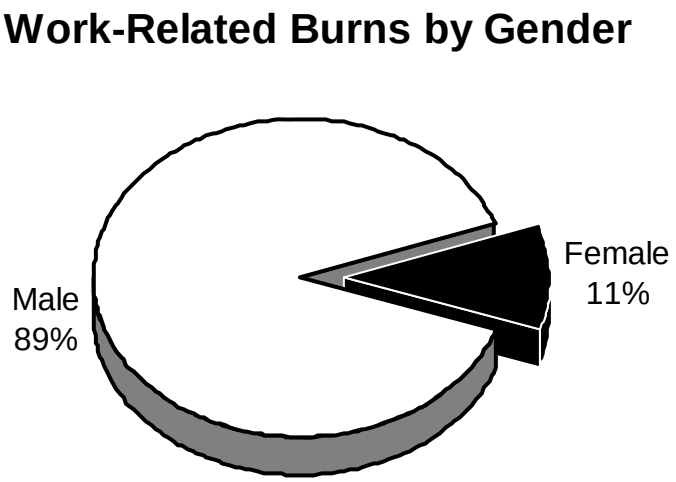
Safety Tips

- Do not smoke when you are tired, drinking alcohol or taking medications, which make you drowsy. If you must smoke, make sure there are working smoke detectors in the immediate vicinity.
- Wear clothes with tight fitting sleeves and watch for clothes touching elements on the stove.
- Do not use a cooking stove for heating purposes or for drying clothes.
- Never leave food that is cooking unattended. Set a kitchen timer to remind you to turn off the burners and/or the oven. If you must leave the kitchen, take a wooden spoon or potholder as a reminder that you have left something unattended on the stove.
- Keep stove surfaces clean of built up grease.
- Do not attempt to lift or carry heavy pots of hot liquid or food.
- Cook with the pot and pan handles turned in.
- Remember "Stop, Drop, & Roll" – It just may save your life.

Work-Related Burn Injuries

13% of Reported Burns Occurred at Work

Massachusetts hospitals indicated that 47, or 13%, of the 358 burn injuries reported in 2006 occurred while the victim was at work. Men were much more likely to be burned while working than women. Forty-two (42) men, 89%, and five women, 11%, were burned at work in 2006. Two (2) victims, or 4% of the reported work-related burns became fatalities.



22% of Work-Related Burns Occurred in Eating and Drinking Establishments

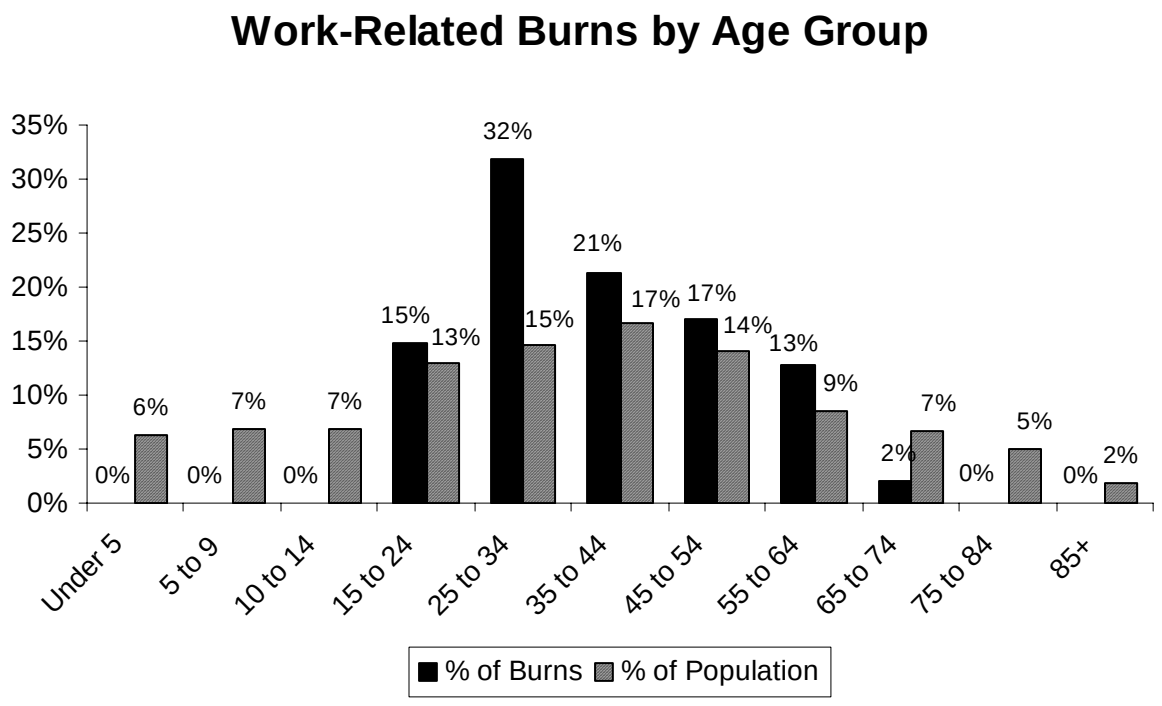
Eight of the reported work-related burns happened in eating and drinking establishments and seven of those individuals were burned while cooking. At least three people were burned with

hot liquids including cooking oil, water, or soup. Other substances causing burns related to food preparation were a hot grill and a broiler explosion. The three youngest individuals burned at work in 2006 (ages 19, 20, and 22) all sustained cooking-related injuries.

The locations or employers of the second greatest number of work-related burns were construction and manufacturing companies, which accounted for six burns each in 2006. Five burns occurred in the "other services except public administration" sector. All of the individuals working in this industry were employed at either automotive repair or car wash companies. Eight burns were classified in "Other Industries," two of these were employed by the same electric utility (in separate incidents). Thirty-three (33) of the thirty-seven work-related burn injuries contained sufficient information to be coded for industry.

85% of Work-Related Burns Incurred by People Between 15 and 54

No one under the age of 17 received a work-related burn in 2006. Seven (7), or 15%, were between 15 and 24 years of age. Fifteen (15), or 32%, of the victims were between 25 and 34 years of age; 10, or 21%, belonged to the 35 to 44 age group. Eight (8), or 17%, of work-related burn injuries were victims 45 to 54 years old. Six (6), or 13% of work-related burns occurred in the 55 to 64 age group. The oldest age group to have a work-related burn injury was the 65 to 74 group and they experienced one, or 2% of the burn injuries in the workplace. The youngest person to receive treatment for a work-related burn in Massachusetts in 2006 was a 17-year old boy who received his injuries in a fireworks plant explosion in Nicaragua. The oldest victim to receive a work-related burn was a 68-year old man who received a steam burn to 15% of his body.



MA Adults 25-34 Burned More than Other MA Workers

Adults between the ages of 25 and 34 make up only 19% of the total working population in Massachusetts[6] yet they sustained 30% of the work-related burns reported in 2006. The youngest worker injured was an 18 year-old male who burned his hand while cooking. No one under the age of 18 experienced a work-related burn. Five (5) or 14% of those who suffered work related-burns were between 15 and 24 years of age. Eleven (11) of the victims were between 25 and 34 years-old, and nine (9), or 24%, belonged to the 35 to 44 age group. Five (5), or 14%, of those who sustained work-related burns were 45 to 54 years old, although this age group comprised 25% of the working population, and six (6) work-related burns occurred in the 55 to 64 age group. The oldest age group to have a work-related burn was the 65 to 74 group and they experienced one injury. A 68-year-old man received a steam burn from a cleaning machine.

Over 1/4 of Work-Related Burns Were Scalds

Scalds were the leading cause of work-related burns in 2006. These 12 burn injuries accounted for 26% of work-related burns. Six (6) involved cooking; four of these burns were the result of cooking liquids; one was from hot food, and the other was from an unspecified cooking activity. Hot tap water, was responsible for four of these burns. Steam was the cause of two of the work-related burns in 2006.

Electrical burns accounted for eight, or 17% of work-related burns in 2006. Three (3) burns involved electrocutions, one was from a flashburn and four were from unspecified electrical accidents.

Seven (7), or 15%, of work-related burn injuries in 2006 were chemical burns.

Six (6), or 13%, of the 47 work-related burns were from explosions in 2006. Two (2) of the work-related injuries caused by explosions involved gasoline. Another two involved fireworks. A boiler and natural gas each caused one work-related explosion burn injury in 2006.

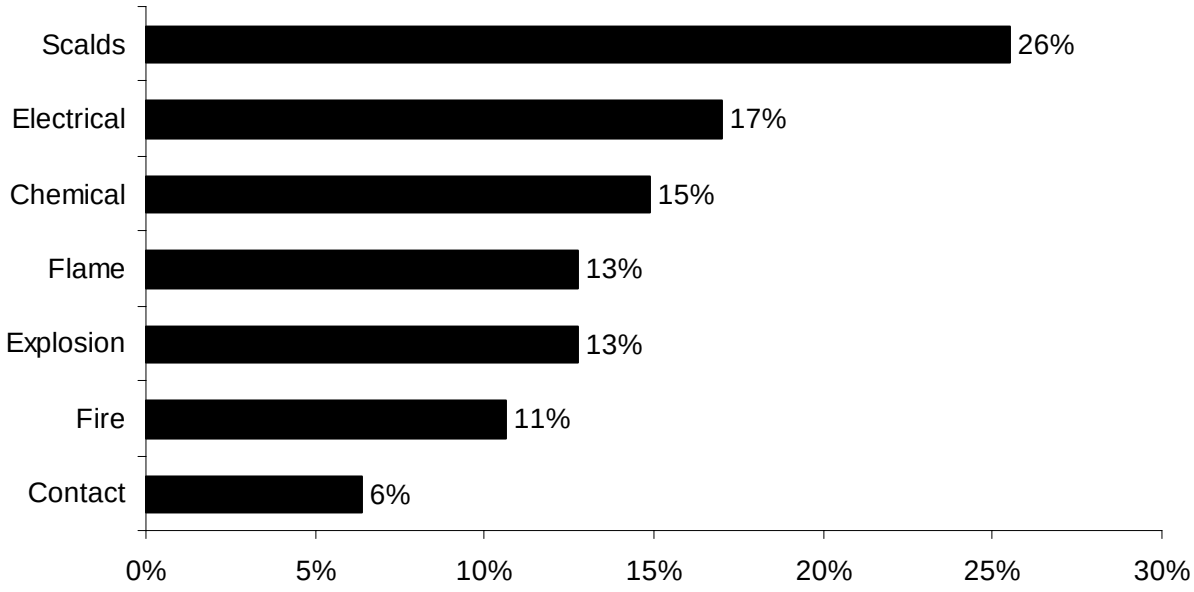
Flame burns accounted for six, or 13%, of these work-related burns. Ignitable liquids caused three of these injuries; including one injury from gasoline. A cutting torch, a flashburn and an unspecified cooking act each caused one of the work-related flame burn injuries in 2006.

Five (5), or 11%, of the work-related burn injuries were from fires. A cutting torch caused one injury at a structure fire; a motor vehicle accident caused a truck fire and the related burn injury; gasoline caused one injury in an unspecified fire; and the other burn injury was caused by an unspecified electrical fire.

Three (3), or 6%, of the work-related burn injuries in 2006 were from contact with hot objects. Two victims came into contact with hot asphalt and a hot machine was responsible for the other injury.

[6] *Massachusetts Employment Data for Rate Calculations*: DataFerrett™ (version 1.3.3) was used to extract workforce estimates from the Current Population Survey for 2006.

Causes of Work-Related Burn Injuries



Work-Related Injuries Resulted in 2 Deaths[7] **& No Life-Threatening Injuries**

In 2006 two burn victims who succumbed to the burn injuries they received while working were reported to M-BIRS. None of the other work-related burn victims' burn injuries were reported to be life-threatening injuries.

- On June 19, 2006, a 29-year old man was seriously burned when the truck he was operating experienced a severe mechanical malfunction. The malfunction caused the truck to roll down a hill and collide with another vehicle. The ensuing collision started a fire. The victim received burns to 40% of his body and later died in the hospital.

- On June 29, 2006, a 55-year old Boston man was helping pave a new basketball court when the load of hot asphalt shifted in the dump truck's bed and accidentally spilled out, partially burying the victim and causing burns to 70% of his body surface area. A month later he was removed from life support and died as a result of his injuries.

Intervention and Prevention Efforts

From 1991-2004, 18 workers were fatally electrocuted when they came in contact with energized power lines, either directly or through their equipment. To educate employers and employees, the Massachusetts Fatality Assessment and Control Evaluation (FACE) Project prepared an Alert

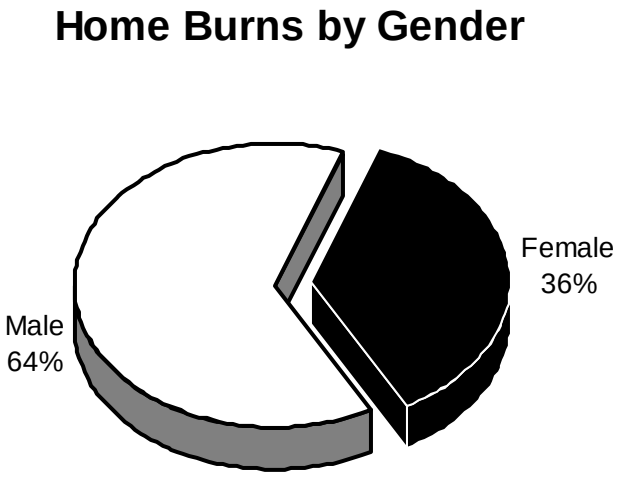
[7] One additional death was associated with a burn in 2006, in which the victim died at the scene and was therefore not reported by hospitals to M-BIRS. A 28-year-old electrical worker died when the transformer he was performing maintenance on exploded. Five additional fatalities were electrocutions, in which it is unclear if burns were associated with the electrocution. A 24-year-old Shrewsbury man was electrocuted while working on an elevator. A piece of aluminum siding stuck a high voltage power line, killing a 42-year-old Brockton man. A 41-year-old employee of a Springfield sign company was killed while he was attempting to change ceiling light bulbs in a mall and touched an exposed live wire. A 25-year-old Brockton man was electrocuted when the weed-cutting tool he was using cut a power line. While working on a damaged telephone pole, a 44-year-old man died when his bucket truck came in contact with a live wire.

that will be distributed to 1,850 MA employers and town building inspectors. The Alert warns of the dangers of overhead power lines, and recommends safety measures.

In addition to the industry-wide efforts to prevent burn injuries, the Massachusetts Department of Public Health seeks to address hazardous conditions by referring select cases to OSHA for compliance inspections. MDPH notifies one of the three OSHA area offices about those companies in which an employee was burned as a result of explosions, chemical exposures, electrocutions, or those that appeared to indicate likely violations of OSHA standards. Twelve burn injuries were referred to OSHA in 2006 for cases that met the criteria. In six of the cases, OSHA was already conducting investigations, including five electrical cases. The remaining six were referred for OSHA investigation, four of which were in the Springfield district. The most common citations for employers in both 2005 and 2006 were failure to provide personal protective equipment for employees engaged in hot work or chemical work. The highest fines were $7000 and $6500 respectively, for two chemical splash cases, one in each of the last two years.

Burn Injuries in the Home

Over 2/3 of Burn Injuries Occur in the Home
The home is the most common place for burn injuries to occur. In 2006, 242 people, over two-thirds (68%), of all the reported burn injuries took place in the victim's home or surrounding yard. More men were burned in their homes than women. One hundred and fifty-four (154) men, 64%, and 88 women, 36%, were burned in their homes in 2006.



46% of All Home Burns Are Scalds

One hundred and twelve (112), or 46%, of the burn injuries that occurred in the home in 2006 were scalds. Cooking caused 47, or 19%, of all 242 home burn injuries; cooking liquids caused 40, hot foods caused 12 and an unspecified cooking act caused one of these 47 injuries. Scalds from hot tap water accounted for 25, or 10%, of these burns. Hot beverages caused 23, or 10% of burns at home. Car radiators accounted for six, or 2% of these burns. Assaults and steam each accounted for two, or 1%, of these burn injuries; while an appliance accounted for one, or less than 1%, of the home burn injuries in 2006.

Flame Burns Account for 21% of All Burns at Home

Flame burns were the second leading cause of burn injuries in the home. Flame burns accounted for 51, or 21%, of all home-related burn injuries. Cooking activities accounted for 11, or 5%, of all home flame burn injuries; clothing ignitions while cooking caused six, barbeques (two were gas powered) caused three of these injuries and cooking grease caused two injuries. Smoking caused 10, or 4%, of these flame burn injuries; five were caused by unspecified smoking activities, three were caused by smoking while on oxygen and two were caused by smoking in bed. Ignitable liquids caused eight, or 3%, of the flame burns sustained in the home; gasoline caused five burns and other ignitable liquids caused three of the burns. Candles accounted for five, or 2%, of these injuries. Heating equipment was the cause for four, or 2%, of the home flame burns; two were caused by a woodstove, and one each involved a boiler and an unspecified heater. Three (3) of these flame burn injuries were caused by assaults, accounting for 1%, of home burns overall. Cutting torches and welding were responsible for three of these flame burns accounting for 1%; two injuries were from welding and one injury was from a cutting torch. Two (2), or 1%, of the home flame burns were caused by alcohol. Another two burns, or 1%, were caused by ignitable gases; one involved propane, the other natural gas. A child playing with a lighter, unspecified explosives, and an unspecified flame burn injury each caused one home-related flame burn injury, accounting for less than 1% of all home burn injuries in 2006.

Burn injuries from fires accounted for 48, or 20% of all burn injuries in homes. Twenty-eight (28) injuries were from house fires accounting for 12% of all home burn injuries. Many of these fires were caused by smoking, and ignitable liquids. Eight (8), or 3%, of these injuries were caused by brush fires. There were seven injuries, or 3%, caused by camp or bon fires in the victim's yards. Four (4) injuries from motor vehicle fires, accounted for 2% of the at-home burn injuries. There was one unspecified fire, accounting for less than 1% of all home fires.

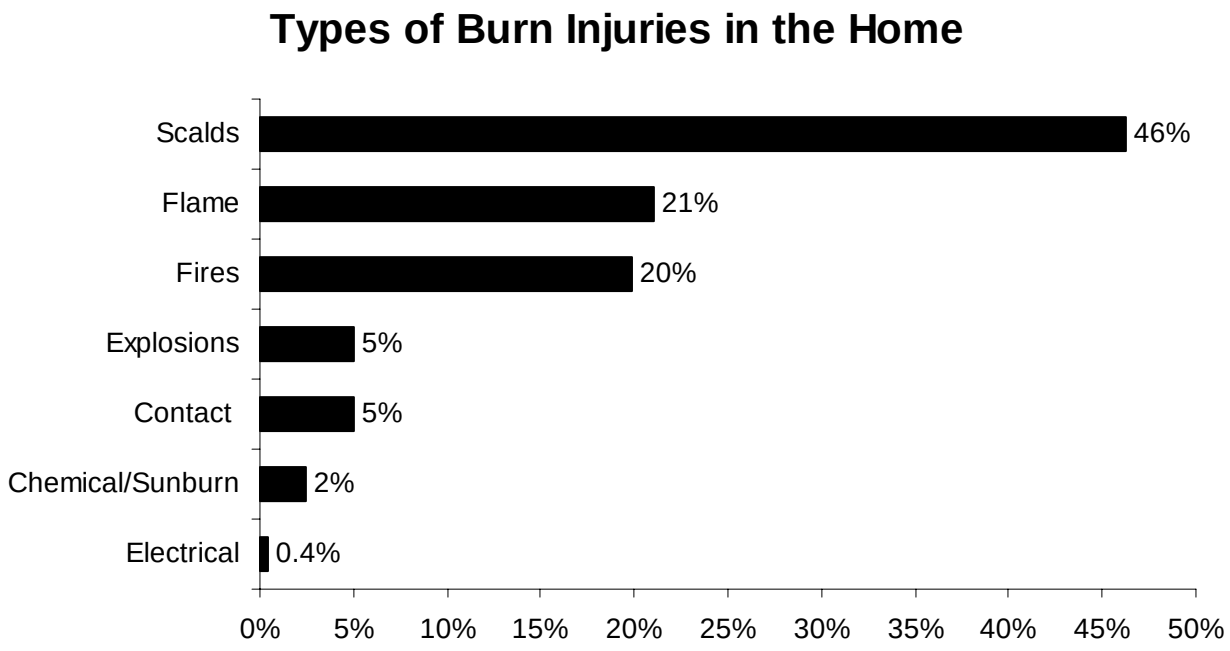
Explosions caused 13, or 5%, of all reported burn injuries in homes in 2006. Propane caused four, or 2% of these injuries. Unspecified cooking acts caused two, or 1%, of these injuries. Ignitable liquids, gasoline and another ignitable liquid, caused two, or 1%, of these injuries. Heating equipment, a space heater and an unspecified heater, also caused two, or 1%, of burn injuries in one's home. An aerosol can, a cutting torch and an unspecified electrical accident were each involved in one, or less than 1%, of the 2006 home burn injuries from explosions.

Contact burn injuries accounted for 11, or 5%, of all the burn injuries that occurred in homes in 2006. Contact with heating equipment was the leading reason for contact burn injuries, causing four, or 2%, of all the at-home burn injuries in 2006. Contact with woodstoves caused two of these heating-related home burns, and contact with a radiator and an unspecified heater each

caused one of these burn injuries. Cooking activities caused three, or 1% of home burns; two involved unspecified cooking acts and the other burn was caused by a touching a hot stove. A heating pad, a piece of metal, wax, and an unspecified contact burn each caused one, or less than 1%, of the reported contact burn injuries that occurred in homes in 2006.

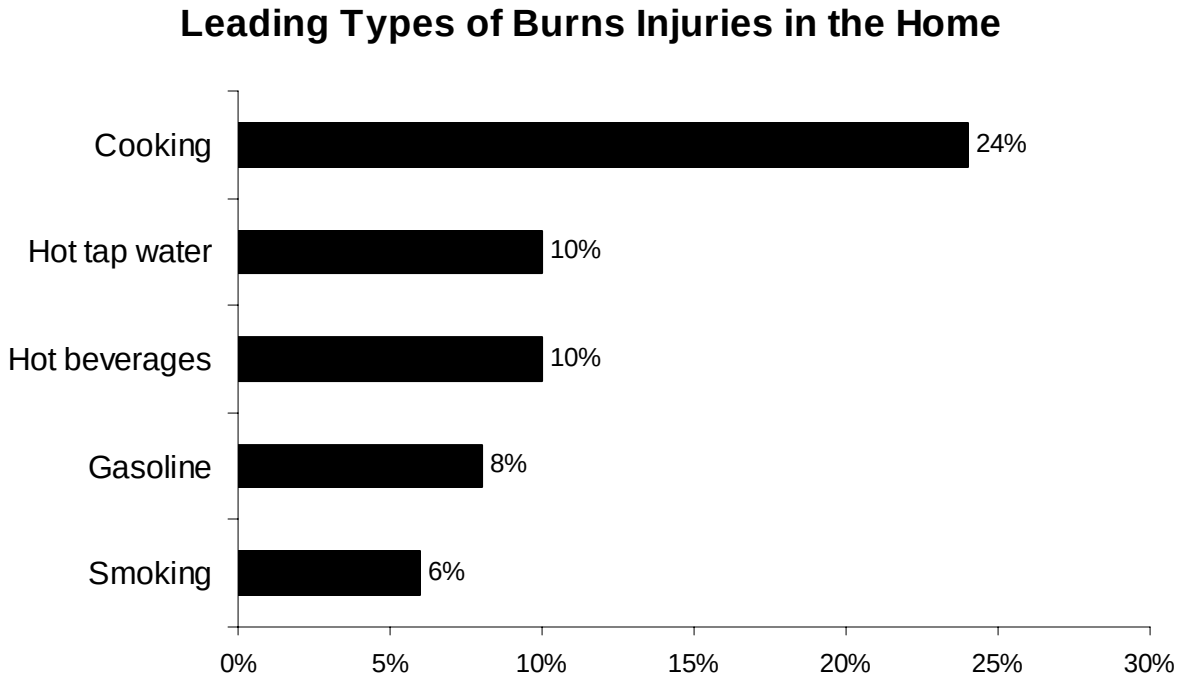
One person was electrocuted in his home causing less than 1% of the home-related burn injuries in 2006.

Six (6) *Other* type of burn injuries were reported occurring to victims in their homes in 2006. These six injuries accounted for 2% of the home burn injuries. Five (5) were chemical burns and one was a sunburn.



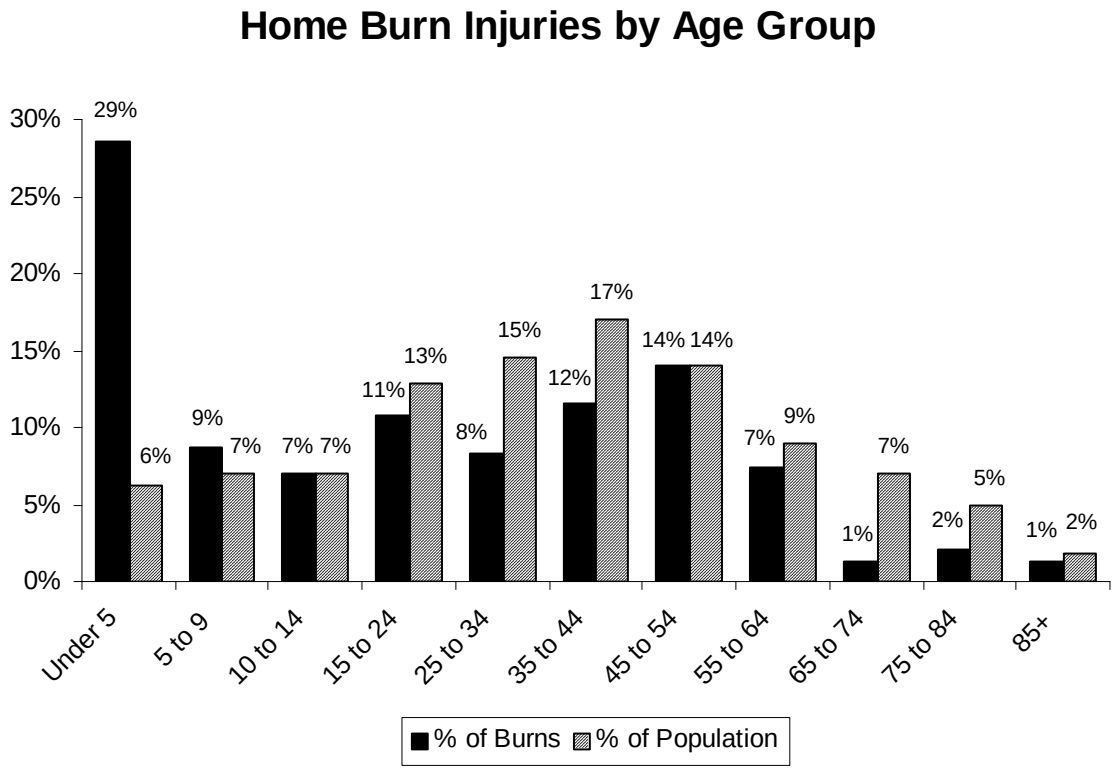
Cooking Caused Almost 1/4 of Burn in Homes

In 2006 cooking activities caused the most overall burns regardless of burn type. Burns from cooking caused 59, or 24%, of burns in Massachusetts' homes. Hot tap water accounted for 25, or 10%, of these burns. Hot beverages were the cause of 23, or 10%, of home burns in 2006. Gasoline, including children playing with gasoline, accounted for 20, or 8%, of these burns. Smoking activities and paraphernalia caused 14, or 6%, of the burn injuries that were reported to have occurred in homes in 2006.



29% of Home Burns Were to Children Under 5

Twenty-nine percent (29%) of the 242 victims that received their burns at home (of known age) were less than five years old. They were almost five times more likely to be burned at home. Children between the ages of five and nine received 9% of the burn injuries that occurred in



people's homes, while children aged 10 to 14 accounted for 7% of these injuries. Young adults between the ages of 15 and 24 were also responsible for 11% of these burns; 8% were between 25 and 34; 12% were between 35 and 44; 14% were between 45 and 54; 7% were between 55 and 64; 1% were between 65 and 74; 2% were between 75 and 84; and 1% were over the age of 85-years old.

Hot Food Scalds Youngest Victim & Oldest Victim Burned by a Candle
A one-month old girl, who received scald burns to 6% of her body from hot food, was the youngest victim to receive an at-home burn injury. The oldest victim to receive a burn at home was a 91-year old woman who received a flame burn injury to 20% of her body surface area from when her clothing ignited when she got too close to a candle.

1% of Home Burns Resulted in Death
Three (3), or 1%, of the 242 reported burn injuries that occurred in homes in 2006 resulted in death for the victim. Two (2), or 67% of these deaths, were men; and one, or 33%, was a woman. The youngest victim to die from burns he received where he was living was a 48-year old homeless man who received burns to 65% of his body when his clothing caught fire while smoking. This incident resulted in a brush fire. The oldest victim to succumb to her injuries was an 82-year old woman who received burns to 50% of her body surface area during a house fire caused by propane. Two (2), or 67%, of the victims received their injuries in house fires, and the other died in a brush fire.

Burn Injury Reports by Hospital

Forty-two (42) out of the 97 acute care health care facilities in Massachusetts submitted a total of 391 burn injury reports for 358 victims to the Massachusetts Burn Injury Reporting System (M-BIRS). Some individuals were treated at more than one hospital, resulting in more burn reports than total victims. For information on the number of burn reports submitted by each hospital, please refer to the table *Number of Reported Burn Injuries Per Hospital* in the Appendix.

Law Requires Hospitals to Report Burn Injuries Over 5% of the Body
Massachusetts General Law (MGL) Chapter 112, Section 12A requires all physicians and medical treatment facilities to immediately report treatment of every burn injury extending to 5% or more of a person's body surface area to the State Fire Marshal and to the police department in the community in which the burn occurred.

Hospitals May Fax Reports or Call and Submit Written Reports
Health care facilities now have a choice about how to report burn injuries. If they choose to do so, health care providers may now fax their burn injury reports to the State Fire Marshal at the Department of Fire Services, (978) 567-3199. A completed transmission will satisfy both the

telephone and written notification provisions of the law. Hospitals not opting for the fax report method must report burn injuries by telephone at (800) 475-3443 and submit a written report.

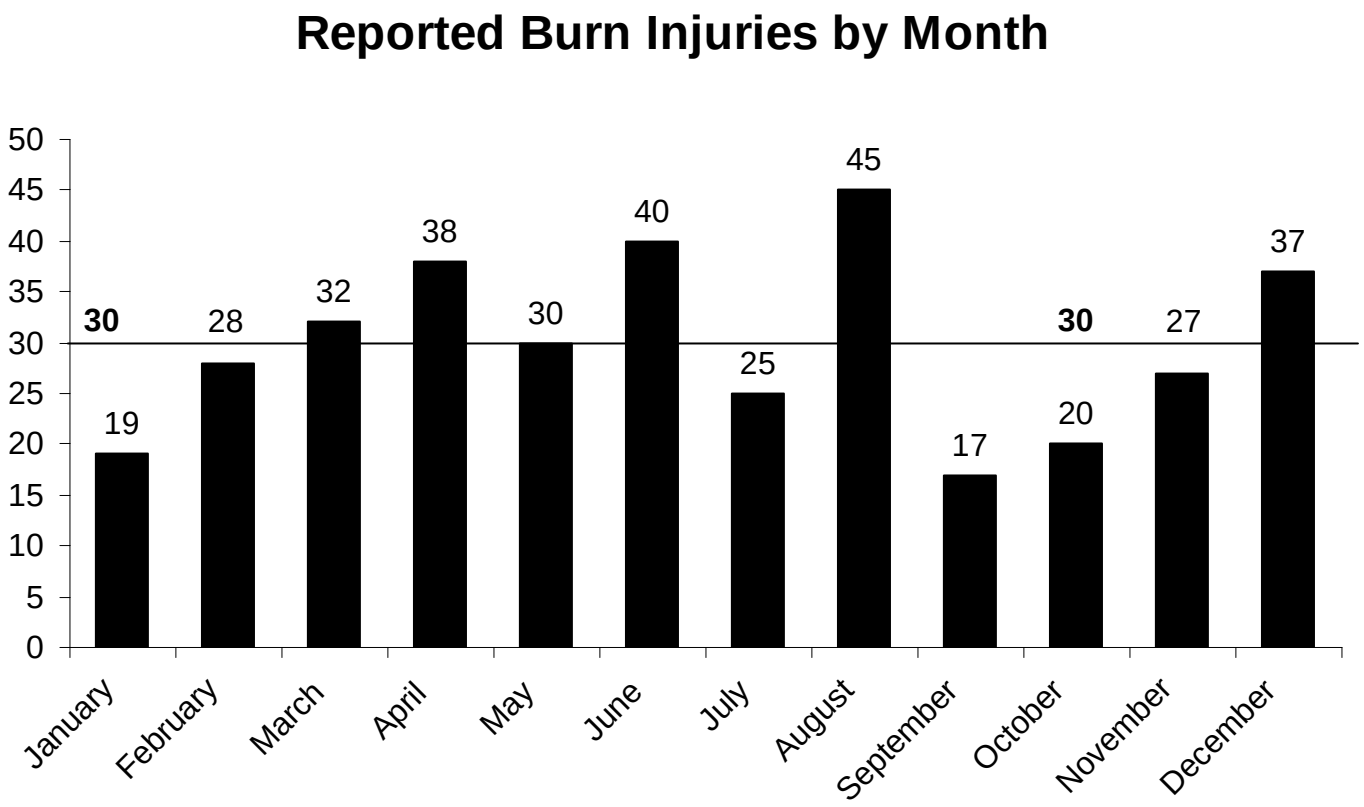
Although M-BIRS was instituted under the Department of Public Safety in June of 1984, Massachusetts hospitals have been required to report burn injuries to a government agency since 1973. M-BIRS, along with the Office of the State Fire Marshal, was carried over to the newly created Department of Fire Services in 1996. It remains a joint program of the Department of Fire Services and the Massachusetts Department of Public Health.

M-BIRS Has Two Main Purposes — Identifying Arsonists and Burn Prevention
Data collected by the Massachusetts Burn Injury Reporting System is used in several ways. Investigators use the data to determine if an arsonist was treated for a burn that resulted from an attempt to illegally burn a building or vehicle. If these burns are not reported promptly, arsonists may continue to light fires that threaten life and property. Our data has also been used to identify problems that need to be addressed by public education or regulation and to develop appropriate strategies. We need to know what type of activity injures whom, if the injuries are seasonal, and how old the victims are to develop and implement effective prevention programs. We appreciate the efforts of the many dedicated doctors, nurses and clerical personnel who report the burn injuries promptly and completely. They make the program work.

Burn Injuries by Month

Average of 30 Burns a Month
An average of 30 burns was reported during each month of 2006, from a low of 17 in September to a high of 45 in August. This average is the lowest for any per month average since 1984, when the average per month was 28 burns. In 2004 and 2001, the average number of burns per month was also 30. It is also below the 10-year (1997-2006) average of 33 burns per month.

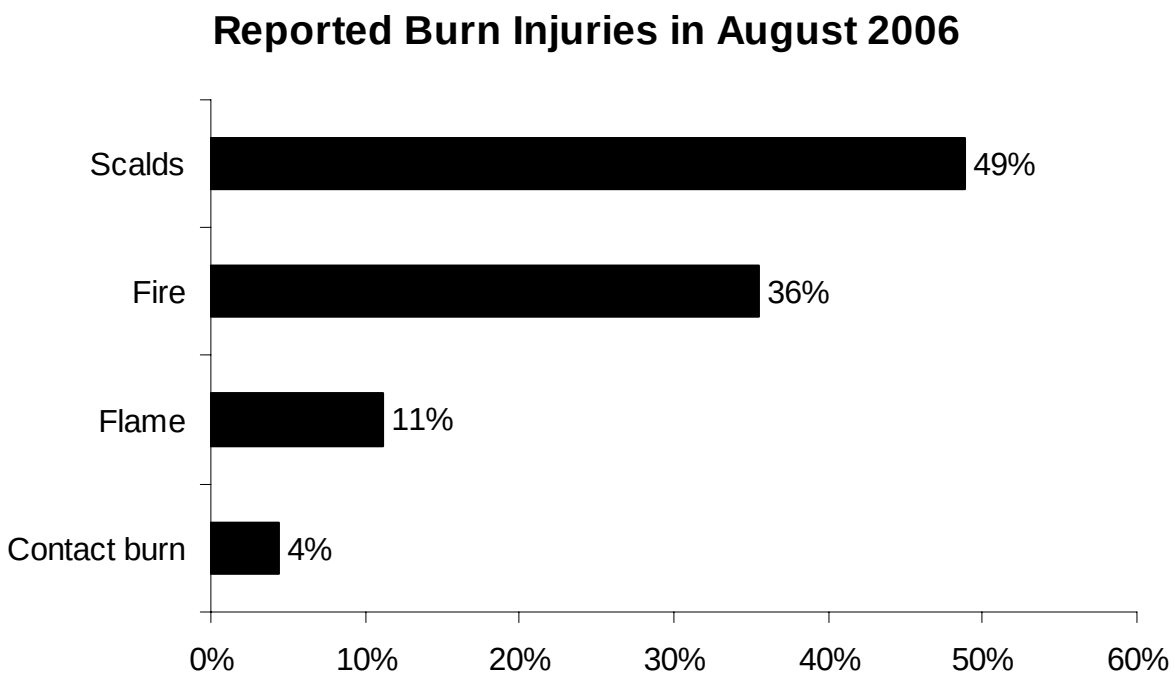
Scalds caused the most burn injuries during seven months of the year. In May, June and July, burns from fires were the leading cause of reported burn injuries. In March and December flame burn injuries were the leading cause of burns injuries.



August Was the Peak Month for Burns
August was the peak month for burns in 2006. Forty-five (45) burn injuries were reported to M-BIRS during August.

Scalds accounted for 22, or 49%, of these burns. Burns from fires accounted for 16, or 36% of August's burn injuries. Flame burn injuries caused five, or 11%, of the burns in August of 2006. Two contact burns, accounted for 4% of these injuries in August 2006 in Massachusetts.

The following chart indicates the leading causes of burn injuries reported in August of 2006.



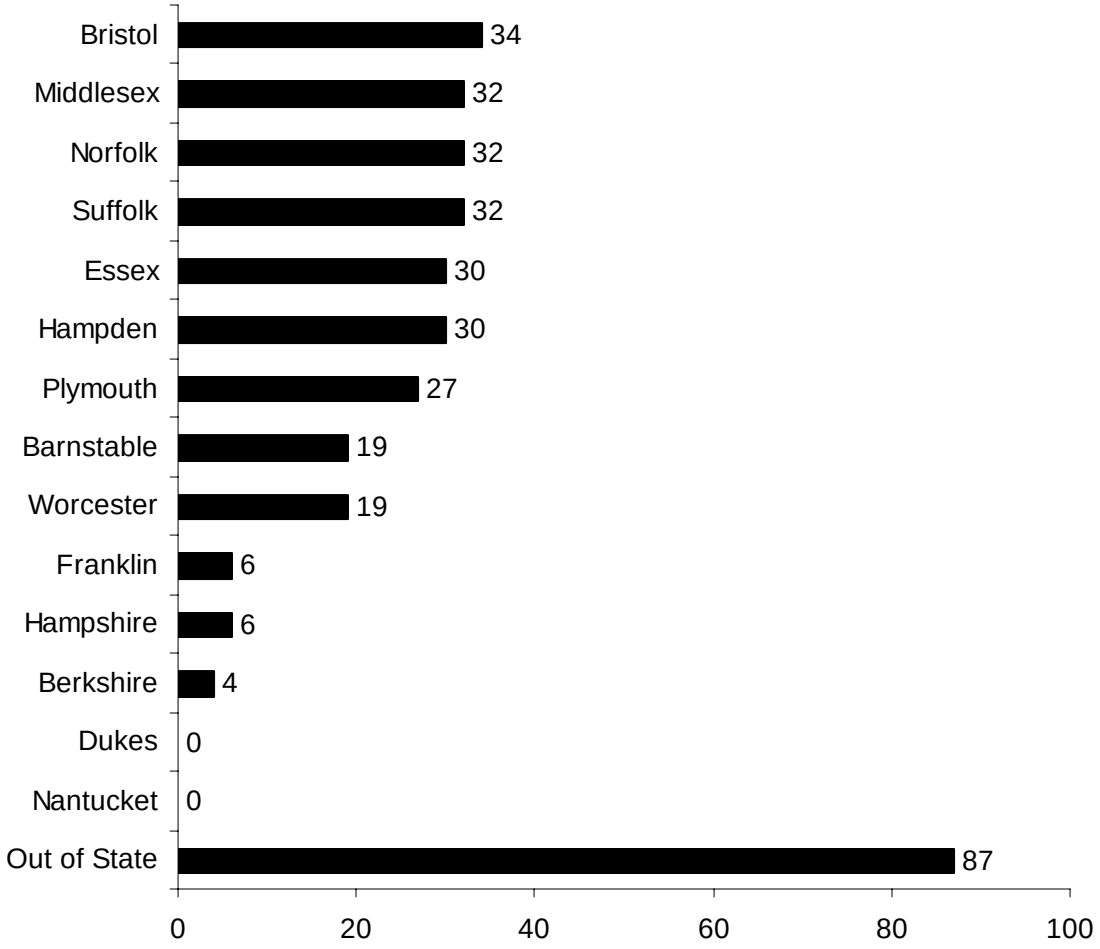
For more information, please refer to the table *Causes of Burn Injuries by Month* in the Appendix.

Geographical Demographics

Massachusetts Burn Victims from 116 Cities and Towns
Massachusetts medical facilities treated 271 residents of 111 Massachusetts cities and towns. Burn victims came from every county in the Commonwealth. The largest numbers of reported burn injuries were incurred by residents of Bristol, Middlesex, Norfolk, and Suffolk counties. It appears that some large Boston hospitals (Suffolk County) may have under reported the burns they treated.

Eighty-seven (87) burn victims from out-of-state received treatment at Massachusetts facilities. Some of the people were injured while vacationing here; others came to Massachusetts specifically for the specialized treatment of burn injuries that is available in the Commonwealth.

Reported Burn Injuries by County



For information on the number of burn victims from each Massachusetts community, please refer to the table *Burn Injuries by Victim's Community* in the Appendix.

Boston & Springfield had the Most Reported Burn Injuries
Boston was home to the most burn injury victims with 21 of its citizens reported to have a burn injury in 2006. Springfield had the second larges number of victims at 19. Brockton had 12 injuries reports and 11 New Bedford citizens received burn injuries. Lynn had nine, Quincy and Fall River each had eight reported burn injuries, while seven Weymouth citizens were burn victims and six Chelsea residents received burn injuries in 2006.

However the map on page 65, *2006 Burns by 10K Population*, displays the number of burns reported by community for every 10,000 of its citizens. The darker the community is shaded the more burns per 10,000 citizens were reported from that municipality. Cities and towns that are white did not have a reported burn injury in 2006.

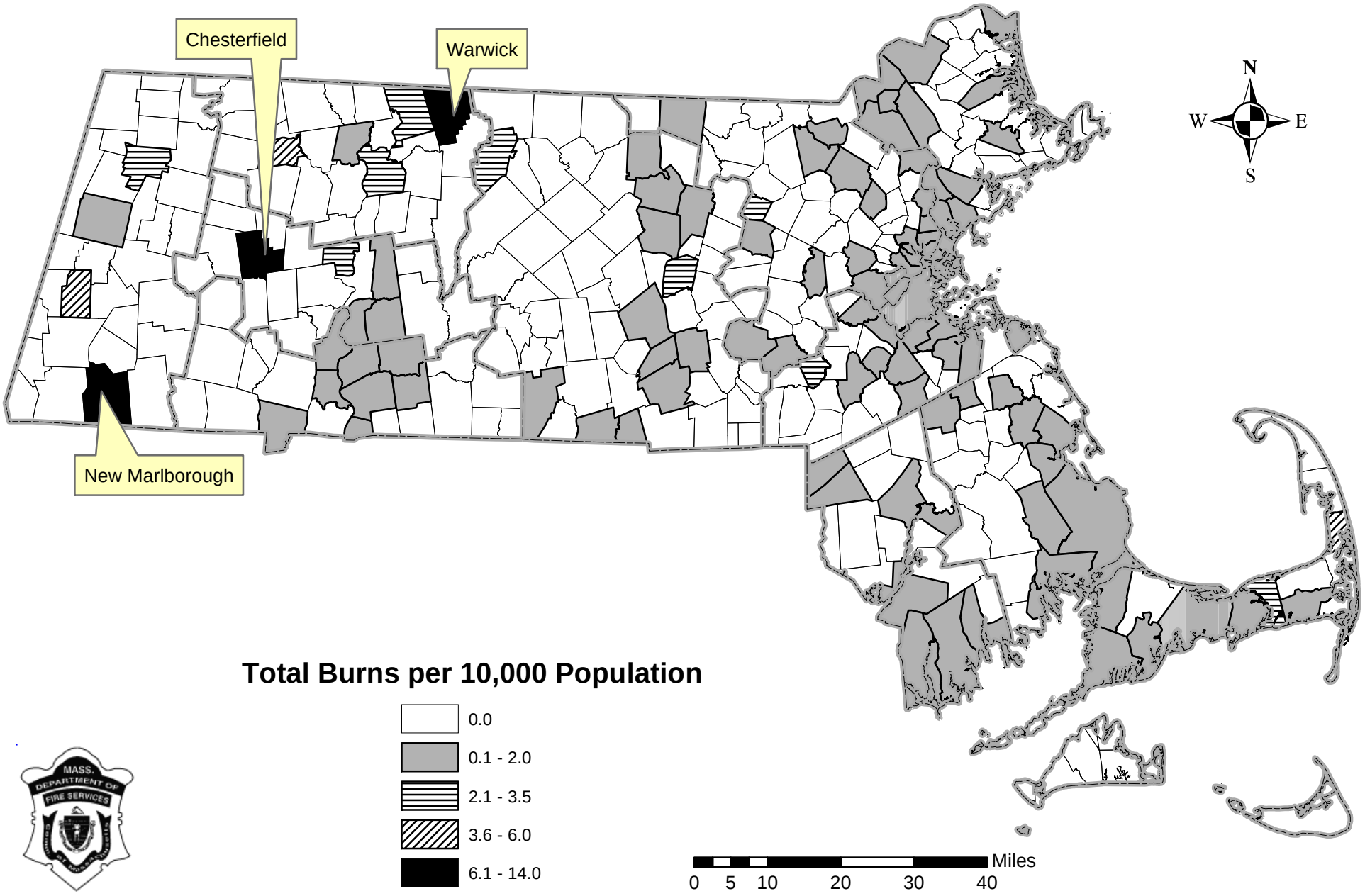
If we look at the number of burn injuries compared to the total population of the individual community we get a different picture. One would expect the bigger cities and towns to have more burn injuries because of their populations. When we calculate the rate of reported burn injuries for every 10,000 people in a given municipality, the ranking changes. The top six communities in terms of number of reported injuries fall towards the bottom of the rankings. Communities with one, two or three reported burns take over the top spots because of the very small populations. These communities may have a rate that far exceeds that actual number of burns that were reported. The legend symbols are consistent in both maps.

Warwick had the highest rate of 13.3 burn injuries per 10,000 population. Next highest was Chesterfield with 8.3 burn injuries per 10,000 population; New Marlborough had 6.7; Buckland had 5.0; Stockbridge had 4.4; and Eastham had 3.7 burn injuries per 10,000 population.

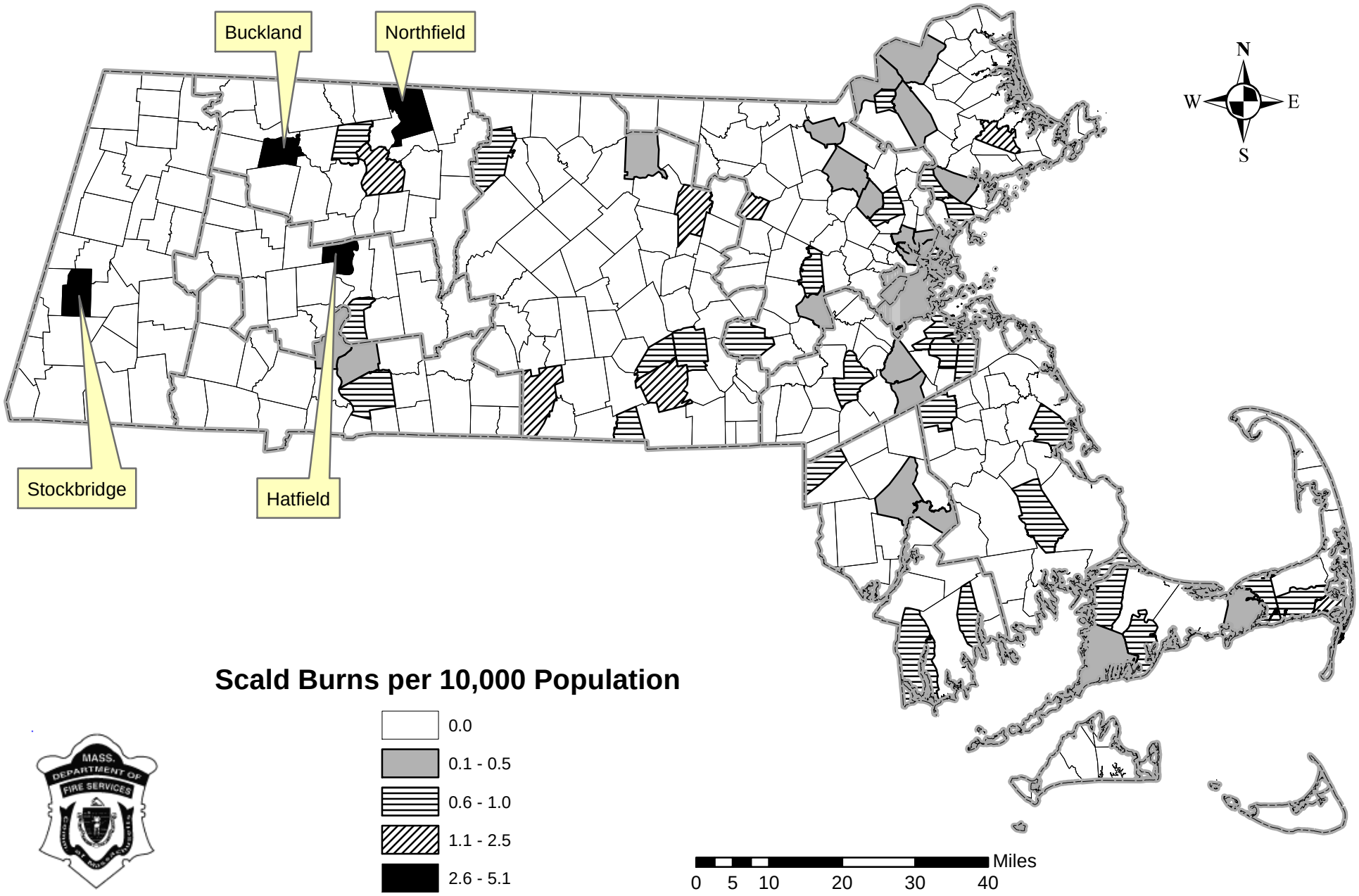
The map on page 66, *2006 Scalds per 10K Population,* displays the rate of reported scald burn injuries by the victim's home community for every 10,000 of that community's population. The darker the community is shaded the more burn injuries per 10,000 people were reported from that municipality. Cities and towns that are white did not have a reported burn injury in 2006.

Buckland had the highest rate of 5.0 scald burn injuries per 10,000 population. Next highest was Stockbridge with 4.4 scald burn injuries per 10,000 population; Northfield had 3.4; Hatfield had 3.1; and Montague had 2.4 scald burn injuries per 10,000 population.

2006 Burns Per 10K Population



2006 Scalds by 10K Population



FP-84F

The Commonwealth of Massachusetts
Department of Fire Services
Office of the State Fire Marshal

Post Office Box 1025 - Stow, Massachusetts 01775

TO: Massachusetts Burn Injury Reporting System

FROM: _____

Name of Hospital and Attending Physician

RE: Burn Injury Extending to 5% or More of Body Surface Area

To fax burn injury reports, dial (978) 567-3199.

When you fax the burn report, you satisfy both the telephone and written reporting notification requirements for the State Fire Marshal. You still need to notify the police chief in the community where the burn occurred.

-OR-

Call 1-800-475-3443 anytime to report burns over the phone AND mail this sheet to the above address.

Victim's Name _____
Last *First* *M.*

Victim's Home Address _____
Street Address (No PO Boxes) **City / Town** **State** **Zip**

Victim's Age _____ Gender _____ Local Police Department Notified? ❑ Yes ❑ No

Was the Victim at Work When Burned? ❑ Yes ❑ No

Date of Burn _____ If Yes: Employer _____

Address Where Burn Occurred _____
Street Address (No PO Boxes) **City / Town** **State** **Zip**

Part of Body Injured or %BSA: _____

Cause of Burn (e.g. spilled coffee, tap water, clothing ignited while cooking): _____

_____

Type of Burn: *(check one)*

☐ Flame ☐ Scald ☐ Chemical
☐ Fire ☐ Electrical ☐ Sunburn
☐ Explosion ☐ Contact ☐ Other

Severity: *(check one)*

☐ Minor ☐ Life-threatening
☐ Moderate ☐ Dead
☐ Severe

If you have any questions about the Massachusetts Burn Injury Reporting System, call the Fire Data and Public Education Unit at (978) 567-3380 or leave a message at 1-800-475-3443.

2006 Appendix

* Italicized names are sub-categories for the headings listed above them.

Specific Causes of Burn Injuries

Cause	# of Burns	% of Burns
Scalds	**133**	**37.2%**
Cooking	63	17.6%
Cooking Liquids	*45*	*12.6%*
Food	*16*	*4.5%*
Cooking (Unspec.)	*2*	*0.6%*
Hot Tap Water	29	8.1%
Beverages	25	7.0%
Car Radiator	7	2.0%
Steam	5	1.4%
Assault	2	0.6%
Appliance	1	0.3%
Pipe	1	0.3%
Fires	**87**	**24.3%**
House Fires	35	9.8%
House Fire (Unspec.)	*13*	*3.6%*
Gasoline	*6*	*1.7%*
Smoking (Unspec.)	*4*	*1.1%*
Propane	*2*	*0.6%*
Explosion	*2*	*0.6%*
Candle	*1*	*0.3%*
Smoking on Oxygen	*1*	*0.3%*
Hair Dryer	*1*	*0.3%*
Electrical	*1*	*0.3%*
Cooking Liquids	*1*	*0.3%*
Cooking (Unspec.)	*1*	*0.3%*
Rescue	*1*	*0.3%*
Camp or Bon Fires	20	5.6%
Gasoline	*7*	*2.0%*
Camp Fire	*5*	*1.4%*
Clothes	*3*	*0.8%*
Assault	*2*	*0.6%*
Aerosol	*1*	*0.3%*
Flammables	*1*	*0.3%*
Bon Fire	*1*	*0.3%*
Motor Vehicle Fires	11	3.1%
MVA	*6*	*1.7%*
Car Fire	*2*	*0.6%*
Car Part	*1*	*0.3%*
Gasoline	*1*	*0.3%*
Fire Control	*1*	*0.3%*

Cause	# of Burns	% of Burns
Fire (con't)		
Brush Fires	11	3.1%
Gasoline	*6*	*1.7%*
Brush Fire	*2*	*0.6%*
Cooking (Unspec.)	*1*	*0.3%*
Ignitable Liquids	*1*	*0.3%*
Cooking/Clothes	*1*	*0.3%*
Structure Fires	6	1.7%
Candle	*4*	*1.1%*
Cutting Torch	*2*	*0.6%*
Fires, Unspecified	4	1.1%
Alcohol	*1*	*0.3%*
Cooking (Unspec.)	*1*	*0.3%*
Electrical	*1*	*0.3%*
Gasoline	*1*	*0.3%*
Flame Burns	**67**	**18.7%**
Cooking	13	3.6%
Cooking/Clothes	*5*	*1.4%*
Barbeque (2-Gas)	*3*	*0.8%*
Cooking Liquids	*2*	*0.6%*
Cooking (Unspec.)	*2*	*0.6%*
Oven	*1*	*0.3%*
Ignitable Liquids	12	3.4%
Gasoline	*7*	*2.0%*
Ignitable Liquids	*5*	*1.4%*
Smoking	12	3.4%
Smoking (Unspec,)	*5*	*1.4%*
Smoking on Oxygen	*3*	*0.8%*
Smoking in Bed	*2*	*0.6%*
Cigarette	*1*	*0.3%*
Lighter	*1*	*0.3%*
Candle	5	1.4%
Welding & Cut. Torch	5	1.4%
Welding	*3*	*0.8%*
Cutting Torch	*2*	*0.6%*
Heating Equipment	5	1.4%
Woodstove	*2*	*0.6%*
Boiler	*1*	*0.3%*
Fireplace	*1*	*0.3%*
Heater (Unspec.)	*1*	*0.3%*

Cause	# of Burns	% of Burns
Flame Burns (con't)		
Assault	4	1.1%
Alcohol	2	0.6%
Explosives	2	0.6%
Explosives	*1*	*0.3%*
Fireworks	*1*	*0.3%*
Ignitable Gases	2	0.6%
Natural Gas	*1*	*0.3%*
Propane	*1*	*0.3%*
Child w/Lighter	1	0.3%
Clothing Ignition	1	0.3%
Flammables	1	0.3%
Flashburn	1	0.3%
Unspecified	1	0.3%
Explosions	**26**	**7.3%**
Ignitable Liquids	5	1.4%
Gasoline	*4*	*1.1%*
Ignitable Liquids	*1*	*0.3%*
Ignitable Gases	5	1.4%
Propane	*4*	*1.1%*
Natural Gas	*1*	*0.3%*
Aerosol Can	4	1.1%
Heating Equipment	4	1.1%
Heater (Unspec.)	*2*	*0.6%*
Boiler	*1*	*0.3%*
Space Heater	*1*	*0.3%*
Cooking (Unspec.)	2	0.6%
Electrical	1	0.3%
Cutting Torch	1	0.3%
Fireworks	1	0.3%
MVA	1	0.3%
Explosion (Unspec.)	1	0.3%

Cause	# of Burns	% of Burns
Contact Burns	**18**	**5.0%**
Heating Equipment	6	1.7%
Woodstove	*4*	*1.1%*
Radiator	*1*	*0.3%*
Heater (Unspec.)	*1*	*0.3%*
Cooking	4	1.1%
Stove	*2*	*0.6%*
Cooking (Unspec.)	*2*	*0.6%*
Asphalt	2	0.6%
Metal	2	0.6%
Heating Pad	1	0.3%
Lava	1	0.3%
Wax	1	0.3%
Unspecified	1	0.3%
Electrical	**13**	**3.6%**
Electrocution	7	2.0%
Electrical (Unspec.)	4	1.7%
Metal	1	0.3%
Flashburn	1	0.3%
Other Burn Injuries	**14**	**3.9%**
Chemical	11	3.1%
Sunburn	2	0.6%
UV Lamp	1	0.3%

Causes of Burn Injuries by Age

UNDER 5	81	22.7%
Cause	**# of Burns**	**% By Age**
Scalds	**62**	**76.5%**
Cooking	26	32.1%
Cooking Liquids	*16*	*19.8%*
Food	*10*	*12.3%*
Beverages	19	23.5%
Hot Tap Water	16	19.8%
Appliance	1	1.2%
Fire	**8**	**9.9%**
House Fires	5	6.2%
House Fire (Unspec.)	*3*	*3.7%*
Candle	*1*	*1.2%*
Gasoline	*1*	*1.2%*
Camp Fires	2	2.5%
Vehicle Fires	1	1.2%
Contact	**6**	**7.4%**
Heating Equipment	3	3.7%
Woodstove	*2*	*2.5%*
Heater (Unspec.)	*1*	*1.2%*
Metal	1	1.2%
Stove	1	1.2%
Unspecified	1	1.2%
Flame	**3**	**3.7%**
Candle	1	1.2%
Child w/Lighter	1	1.2%
Cooking/Clothes	1	1.2%
Explosion	**2**	**2.5%**
Electrical	1	1.2%
Unspecified	1	1.2%

AGES 5 TO 9	23	6.4%
Cause	**# of Burns**	**% By Age**
Scalds	**10**	**43.5%**
Cooking	5	21.7%
Cooking Liquids	*4*	*17.4%*
Food	*1*	*4.3%*
Hot Tap Water	3	13.0%
Assault	1	4.3%
Beverages	1	4.3%
Fires	**6**	**26.1%**
House Fires	5	21.7%
Gasoline	*3*	*13.0%*
House Fire (Unspec.)	*2*	*8.7%*
Brush Fires	1	4.3%
Gasoline	*1*	*4.3%*
Flame	**3**	**13.0%**
Candle	1	4.3%
Clothes	1	4.3%
Gasoline	1	4.3%
Explosion	**2**	**8.7%**
Propane	1	4.3%
Space Heater	1	4.3%
Contact	**1**	**4.3%**
Cooking (Unspec.)	1	4.3%
Electrical	**1**	**4.3%**
Electrocution	1	4.3%

AGES 10 TO 14	**26**	**7.3%**
Cause	**# of Burns**	**% By Age**
Fire	**8**	**30.8%**
House Fire	3	11.5%
Gasoline	*2*	*7.7%*
Cooking (Unspec.)	*1*	*3.8%*
Camp or Bon Fires	2	7.7%
Clothes	*2*	*7.7%*
Vehicle Fires	2	7.7%
MVA	*2*	*7.7%*
Brush Fires	1	3.8%
Gasoline	*1*	*3.8%*
Scalds	**7**	**26.9%**
Cooking Liquids	4	15.4%
Beverages	2	7.7%
Hot Tap Water	1	3.8%
Explosion	**4**	**15.4%**
Aerosol Can	3	11.5%
Heater (Unspec.)	1	3.8%
Flame	**4**	**15.4%**
Cooking/Clothes	2	7.7%
Alcohol	1	3.8%
Gasoline	1	3.8%
Contact	**1**	**3.8%**
Metal	1	3.8%
Electrical	**1**	**3.8%**
Metal	1	3.8%
Other	**1**	**3.8%**
Chemical	1	3.8%

AGES 15 TO 24	**51**	**14.3%**
Cause	**# of Burns**	**% By Age**
Fire	**15**	**29.4%**
Camp or Bon Fires	11	21.6%
Gasoline	*5*	*9.8%*
Assault	*2*	*3.9%*
Aerosol Can	*1*	*2.0%*
Bon Fire (Unspec.)	*1*	*2.0%*
Camp Fire (Unspec.)	*1*	*2.0%*
Clothes	*1*	*2.0%*
Vehicle Fires	2	3.9%
Gasoline	*1*	*2.0%*
MVA	*1*	*2.0%*
Brush Fires	1	2.0%
Gasoline	*1*	*2.0%*
House Fires	1	2.0%
Hair Dryer	*1*	*2.0%*
Flame	**14**	**27.5%**
Ignitable Liquids	3	5.9%
Gasoline	*2*	*3.9%*
Ignitable Liquids	*1*	*2.0%*
Cooking	2	3.9%
Barbeque (Gas)	*1*	*2.0%*
Cooking Liquids	*1*	*2.0%*
Smoking	2	3.9%
Cigarette	*1*	*2.0%*
Smoking (Unspec.)	*1*	*2.0%*
Welding & Cut. Torch	2	3.9%
Cutting Torch	*1*	*2.0%*
Welding	*1*	*2.0%*
Alcohol	1	2.0%
Assault	1	2.0%
Fireplace	1	2.0%

Cause	**# of Burns**	**% By Age**
Flame (con't)		
Fireworks	1	2.0%
Flammables	1	2.0%
Scalds	**11**	**21.6%**
Cooking	6	11.8%
Cooking Liquids	*3*	*5.9%*
Food	*2*	*3.9%*
Cooking (Unspec.)	*1*	*2.0%*
Car Radiator	3	5.9%
Hot Tap Water	1	2.0%
Steam	1	2.0%
Explosion	**7**	**13.7%**
Fireworks	2	3.9%
Ignitable Liquids	2	3.9%
Gasoline	*1*	*2.0%*
Ignitable Liquids	*1*	*2.0%*
Heating Equipment	2	3.9%
Boiler	*1*	*2.0%*
Heater (Unspec.)	*1*	*2.0%*
MVA	1	2.0%
Contact	**2**	**3.9%**
Lava	1	2.0%
Wax	1	2.0%
Electrical	**2**	**3.9%**
Electrocution	2	3.9%

AGES 25 TO 34	**47**	**13.2%**
Cause	**# of Burns**	**% By Age**
Scalds	**13**	**27.7%**
Cooking Liquids	7	14.9%
Hot Tap Water	2	4.3%
Steam	2	4.3%
Pipe	1	2.1%
Car Radiator	1	2.1%
Fire	**13**	**27.7%**
Vehicle Fires	4	8.5%
MVA	*2*	*4.3%*
Car Fire	*1*	*2.1%*
Fire Control	*1*	*2.1%*
Brush Fires	3	6.4%
Gasoline	*2*	*4.3%*
Brush Fire	*1*	*2.1%*
Camp or Bon Fire	2	4.3%
Flammables	*1*	*2.1%*
Camp Fire	*1*	*2.1%*
Fires (Unspec.)	2	4.3%
Alcohol	*1*	*2.1%*
Electrical	*1*	*2.1%*
House Fires	1	2.1%
Structure Fires	1	2.1%
Cutting Torch	*1*	*2.1%*
Flame	**8**	**17.0%**
Assault	2	4.3%
Ignitable Liquids	2	4.3%
Cutting Torch	1	2.1%
Cooking/Clothes	1	10.8%
Smoking (Unspec.)	1	2.1%
Unspecified	1	2.1%

Cause	**# of Burns**	**% By Age**
Contact Burns	**3**	**6.4%**
Cooking	2	4.3%
Cooking (Unspec.)	*1*	*2.1%*
Stove	*1*	*2.1%*
Heating Pad	1	2.1%
Electrical	**3**	**6.4%**
Electrocution	2	4.3%
Unspecified	1	2.1%
Explosions	**3**	**6.4%**
Gasoline	1	2.1%
Propane	1	2.1%
Cooking (Unspec.)	1	2.1%
Other	**4**	**8.5%**
Chemical	2	4.3%
Sunburn	1	2.1%
UV Lamp	1	2.1%

AGES 35 TO 44	**45**	**12.6%**
Cause	**# of Burns**	**% By Age**
Fire	**17**	**37.8%**
House Fires	8	17.8%
House Fire (Unspec.)	*4*	*8.9%*
Explosion	*1*	*2.2%*
Electrical	*1*	*2.2%*
Self-Immolation	*1*	*2.2%*
Smoking (Unspec.)	*1*	*2.2%*
Brush Fires	3	6.7%
Cooking (Unspec.)	*1*	*2.2%*
Gasoline	*1*	*2.2%*
Brush Fire (Unspec.)	*1*	*2.0%*
Camp or Bon Fires	3	6.7%
Gasoline	*2*	*4.4%*
Campfire (Unspec.)	*1*	*2.2%*
Fires, Unspecified	2	4.4%
Cooking (Unspec.)	*1*	*2.2%*
Gasoline	*1*	*2.2%*
Structure Fires	1	2.2%
Cutting Torch	*1*	*2.2%*
Flame	**11**	**24.4%**
Ignitable Liquids	4	8.9%
Gasoline	*3*	*6.7%*
Ignitable Liquids	*1*	*2.2%*
Smoking	2	4.4%
Cooking	2	4.4%
Barbeque (Gas)	*1*	*2.2%*
Oven	*2*	*2.2%*
Explosives	1	2.2%

Cause	**# of Burns**	**% By Age**
Flame (con't)		
Flashburn	1	2.2%
Welding	1	2.2%
Scalds	**8**	**17.8%**
Cooking Liquids	4	8.9%
Hot Tap Water	2	4.4%
Beverages	1	2.2%
Car Radiator	1	2.2%
Explosions	**2**	**4.4%**
Cooking (Unspec.)	1	2.2%
Propane	1	2.2%
Electrical	**2**	**4.4%**
Flashburn	1	2.2%
Electrical (Unspec.)	1	2.2%
Contact	**1**	**2.2%**
Radiator	1	2.2%
Other	**4**	**8.9%**
Chemical	3	6.7%
Sunburn	1	2.2%

AGES 45 TO 54	**46**	**12.9%**
Cause	**# of Burns**	**% By Age**
Flame	**15**	**32.6%**
Smoking	4	8.7%
Smoking on Oxygen	*2*	*4.3%*
Smoking in Bed	*1*	*2.2%*
Lighter	*1*	*2.2%*
Cooking	3	6.5%
Barbeque	*1*	*2.2%*
Cooking Liquids	*1*	*2.2%*
Cooking/Clothes	*1*	*2.2%*
Heating Equipment	3	6.5%
Heater (Unspec.)	*1*	*2.2%*
Boiler	*1*	*2.2%*
Woodstove	*1*	*2.2%*
Assault	1	2.2%
Candle	1	2.2%
Ignitable Liquid	1	2.2%
Natural Gas	1	2.2%
Welding	1	2.2%
Scalds	**11**	**23.9%**
Cooking	4	8.7%
Cooking Liquids	*3*	*6.5%*
Food	*1*	*2.2%*
Car Radiator	2	4.3%
Hot Tap Water	2	4.3%
Assault	1	2.2%
Beverage	1	2.2%
Steam	1	2.2%
Fire	**9**	**19.6%**
House Fires	3	6.5%
Smoking (Unspec.)	*1*	*2.2%*
Explosion	*1*	*2.2%*
House Fire (Unspec.)	*1*	*2.2%*

Cause	**# of Burns**	**% By Age**
Fires (con't)		
Structure Fires	3	6.5%
Candle	*3*	*6.5%*
Vehicle Fires	2	4.3%
Car Part	*1*	*2.2%*
Car Fire	*1*	*2.2%*
Brush Fires	1	2.2%
Smoking/Clothes	*1*	*2.2%*
Explosions	**4**	**8.7%**
Ignitable Gases	2	4.3%
Natural Gas	*1*	*2.2%*
Propane	*1*	*2.2%*
Aerosol Can	1	2.2%
Gasoline	1	2.2%
Contact	**2**	**4.3%**
Asphalt	1	2.2%
Woodstove	1	2.2%
Electrical	**2**	**4.3%**
Electrocution	1	2.2%
Electrical (Unspec.)	1	2.2%
Other	**3**	**6.5%**
Chemical	3	6.5%

AGES 55 TO 64	**27**	**7.5%**
Cause	**# of Burns**	**% By Age**
Fire	**9**	**33.3%**
House Fires	7	25.9%
Smoking (Unspec.)	*2*	*7.4%*
Smoking on Oxygen	*1*	*3.7%*
House Fire (Unspec.)	*2*	*7.7%*
Cooking Liquids	*1*	*3.7%*
Rescue	*1*	*3.7%*
Brush Fires	1	3.7%
Ignitable Liquids	*1*	*3.7%*
Structure Fires	1	3.7%
Candle	*1*	*3.7%*
Scalds	**6**	**22.2%**
Cooking	5	18.5%
Cooking Liquids	*3*	*11.1%*
Food	*1*	*3.7%*
Cooking (Unspec.)	*1*	*3.7%*
Hot Tap Water	1	3.7%
Flame	**6**	**22.2%**
Smoking	2	7.4%
Smoking in Bed	*1*	*3.7%*
Smoking	*1*	*3.7%*
Candle	1	3.7%
Cooking (Unspec.)	1	3.7%
Propane	1	3.7%
Woodstove	1	3.7%
Explosion	**2**	**7.4%**
Gasoline	1	3.7%
Cutting Torch	1	3.7%
Electrical	**2**	**7.4%**
Electrocuting	1	3.7%
Electrical (Unspec.)	1	3.7%
Contact	**1**	**3.7%**
Asphalt	1	3.7%
Other	**1**	**3.7%**
Chemical	1	3.7%

AGES 65+	**12**	**3.4%**
Cause	**# of Burns**	**% By Age**
Scalds	**5**	**41.7%**
Cooking	2	16.7%
Cooking Liquids	*1*	*8.3%*
Food	*1*	*8.3%*
Beverages	1	8.3%
Hot Tap Water	1	8.3%
Steam	1	8.3%
Flame	**3**	**25.0%**
Candle	1	8.3%
Cooking/Clothes	1	8.3%
Smoking on Oxygen	1	8.3%
Fire	**2**	**16.7%**
House Fires	2	16.7%
Propane	*2*	*16.7%*
Contact	**1**	**8.3%**
Woodstove	1	8.3%
Other	**1**	**8.3%**
Chemical	1	8.3%

Causes of Work-Related Burns

Cause	# of Burns	% of Total
Scalds	**12**	**26%**
Cooking	6	13%
Cooking Liquids	*4*	*9%*
Food	*1*	*2%*
Cooking (Unspec.)	*1*	*2%*
Hot Tap Water	4	9%
Steam	2	4%
Electrical	**8**	**17%**
Unspecified	4	9%
Electrocution	3	7%
Flashburn	1	2%
Other	**7**	**15%**
Chemical	7	15%
Explosion	**6**	**13%**
Gasoline	2	4%
Fireworks	2	4%
Boiler	1	2%
Natural Gas	1	2%

Cause	# of Burns	% of Total
Flame	**6**	**13%**
Ignitable Liquids	3	7%
Ignitable Liquids	*2*	*4%*
Gasoline	*1*	*2%*
Cooking (Unspec.)	1	2%
Flashburn	1	2%
Cutting Torch	1	2%
Fire	**5**	**11%**
Structure Fires	2	4%
Cutting Torch	*2*	*4%*
MV Fires	1	2%
MVA	*1*	*2%*
Fires, Unspecified	2	4%
Electrical	*1*	*2%*
Gasoline	*1*	*2%*
Contact	**3**	**6%**
Asphalt	2	4%
Stove	1	2%
Total	**46**	**100%**

2 Deaths

Number of Reported Burns Per Hospital

Anna Jacques Hospital	1
Athol Memorial Hospital	4
Baystate Medical Center	23
Berkshire Medical Center	1
Boston Medical Center	3
Brockton Hospital	3
Brigham & Women's Hospital	38
Cape Cod Hospital	8
Charlton Memorial Hospital	9
Fairview Hospital	2
Falmouth Hospital	7
Franklin Medical Center	4
Good Samaritan Medical Center	4
Harrington Memorial Hospital	1
Health Alliance Hospital, Leominster	2
Henry Heywood Hospital	1
Holy Family Hospital	1
Hubbard Regional Hospital	3
Jordan Hospital	3
Lawrence General Hospital	3
Lowell General Hospital	1
Massachusetts General Hospital	102
Melrose – Wakefield Hospital	3
Mercy Hospital	4
Metro West Medical Center	1
Nantucket Cottage Hospital	1
New England Medical Center	1
North Adams Regional Hospital	1
North Shore Medical Center	1
Norwood Hospital	1
St. Luke’s Hospital	11
St. Vincent’s Hospital	2
Salem Hospital	1
South Shore Hospital	15
Shriners Burns Hospital	111
Sturdy Memorial Hospital	3
Tobey Hospital	4
UMass Medical Center, University	5
Wachusett Emergency Physicians	1
Winchester Hospital	1
Wing Memorial Hospital & MC	1

Causes of Burn Injuries by Month

JANUARY	19	5.3%
Cause	**# of Burns**	**% By Month**
Scalds	**11**	**68.8%**
Cooking	5	26.3%
Cooking Liquids	*3*	*18.8%*
Food	*2*	*12.5%*
Hot Tap Water	4	25.0%
Beverages	1	6.3%
Pipe	1	6.3%
Fire	**3**	**18.8%**
House Fires	3	18.8%
House Fire (Unspec.)	*2*	*12.5%*
Smoking (Unspec.)	*1*	*6.3%*
Explosion	**2**	**12.5%**
Propane	1	6.3%
Space Heater	1	6.3%
Flame	**2**	**12.5%**
Gasoline	1	6.3%
Woodstove	1	6.3%
Electrical	**1**	**6.3%**
Electrical (Unspec.)	1	6.3%

1 Death

FEBRUARY	28	7.8%
Cause	**# of Burns**	**% By Month**
Scalds	**12**	**42.9%**
Hot Tap Water	4	14.3%
Cooking	4	14.3%
Cooking Liquids	*2*	*7.1%*
Food	*2*	*7.1%*
Beverages	2	7.1%
Appliance	1	3.6%
Steam	1	3.6%
Flame	**7**	**25.0%**
Candle	2	7.1%
Cooking/Clothes	2	7.1%
Flammables	1	3.6%
Smoking (Unspec.)	1	3.6%
Woodstove	1	3.6%
Explosion	**3**	**10.7%**
Ignitable Liquids	2	7.1%
Ignitable Liquids	*1*	*3.6%*
Gasoline	*1*	*3.6%*
Cooking (Unspec.)	1	3.6%
Contact	**2**	**7.1%**
Cooking (Unspec.)	1	3.6%
Woodstove	1	3.6%
Fire	**2**	**7.1%**
House Fires	2	7.1%
Gasoline	*1*	*3.6%*
House Fire (Unspec.)	*1*	*3.6%*
Other	**2**	**7.1%**
Chemical	2	7.1%

MARCH	**32**	**9.0%**
Cause	**# of Burns**	**% By Month**
Flame	**10**	**31.3%**
Smoking	4	12.5%
Cigarette	*1*	*3.1%*
Smoking on Oxygen	*1*	*3.1%*
Smoking in Bed	*1*	*3.1%*
Lighter	*1*	*3.1%*
Assault	2	3.3%
Cooking/Clothes	1	6.3%
Smoking in Bed	1	3.1%
Child w/Lighter	1	3.1%
Welding	1	3.1%
Scalds	**9**	**28.1%**
Cooking	5	15.6%
Food	*3*	*9.4%*
Cooking Liquids	*2*	*6.3%*
Hot Tap Water	3	9.4%
Beverages	1	3.1%
Fire	**7**	**21.9%**
Brush Fires	2	6.3%
Gasoline	*1*	*3.1%*
Smoking/Clothes	*1*	*3.1%*
House Fires	2	6.3%
Hair Dryer	*1*	*3.1%*
House Fire	*1*	*3.1%*
MV Fires	2	6.3%
Camp or Bon Fires	1	3.1%
Clothing	*1*	*3.1%*
Explosion	**4**	**12.5%**
Aerosol Can	1	3.1%
Heater	1	3.1%
MVA	1	3.1%
Cutting Torch	1	3.1%
Electrical	**1**	**3.1%**
Unspecified	1	3.1%
Other	**1**	**3.1%**
Chemical	1	3.1%
1 Death		

APRIL	**38**	**10.6%**
Cause	**# of Burns**	**% By Month**
Scalds	**14**	**36.8%**
Cooking Liquids	6	15.8%
Hot Tap Water	5	13.2%
Beverages	2	5.3%
Steam	1	2.6%
Fire	**8**	**21.1%**
MV Fires	2	5.3%
MVA	*2*	*5.3%*
Brush Fires	2	5.3%
Cooking (Unspec)	*1*	*2.6%*
Gasoline	*1*	*2.6%*
House Fires	2	5.3%
Smoking (Unspec.)	*1*	*2.6%*
House Fire (Unspec.)	*1*	*2.6%*
Camp or Bon Fires	1	2.6%
Assault	*1*	*2.6%*
Fires, Unspecified	1	2.6%
Cooking (Unspec.)	*1*	*2.6%*
Flame	**8**	**21.1%**
Cooking	3	7.9%
Barbeque (Gas)	*1*	*2.6%*
Cooking/Clothes	*1*	*2.6%*
Cooking Liquids	*2*	*2.6%*
Ignitable Liquids	2	5.3%
Child w/Gasoline	*1*	*2.6%*
Gasoline	*1*	*2.6%*
Cutting Torch	1	2.6%
Clothes	1	2.6%
Natural Gas	1	2.6%
Contact	**4**	**10.5%**
Heating Equipment	3	7.9%
Woodstove	*2*	*5.3%*
Radiator	*1*	*2.6%*
Stove	1	2.6%
Explosion	**2**	**5.3%**
Gasoline	1	2.6%
Natural Gas	1	2.6%
Other	**2**	**5.3%**
Chemical	1	2.6%
UV Lamp	1	2.6%

MAY	**30**	**13.3%**
Cause	**# of Burns**	**% By Month**
Fire	**8**	**26.7%**
Camp or Bon Fires	3	10.0%
Clothing	*1*	*3.3%*
Gasoline	*1*	*3.3%*
Camp Fire	*1*	*3.3%*
Brush Fires	2	6.7%
Gasoline	*1*	*3.3%*
Brush Fire	*1*	*3.3%*
House Fires	2	6.7%
Cooking (Unspec.)	*1*	*3.3%*
House Fire (Unspec.)	*1*	*3.3%*
MV Fires	1	3.3%
Car Fire	*1*	*3.3%*
Flame	**7**	**23.3%**
Smoking (Unspec.)	2	6.7%
Ignitable Liquids	3	10.0%
Gasoline	*2*	*6.7%*
Ignitable Liquids	*1*	*3.3%*
Oven	1	3.3%
Welding	1	3.3%
Scalds	**7**	**23.3%**
Cooking Liquids	4	13.3%
Beverages	1	3.3%
Hot Tap Water	1	3.3%
Steam	1	3.3%
Contact	**2**	**6.7%**
Metal	1	3.3%
Stove	1	3.3%
Electrical	**2**	**6.7%**
Electrical (Unspec.)	1	6.7%
Other	**4**	**13.3%**
Chemical	3	10.0%
Sunburn	1	3.3%

2 Deaths in June

JUNE	**40**	**11.2%**
Cause	**# of Burns**	**% By Month**
Fire	**15**	**37.5%**
Camp or Bon Fires	6	15.0%
Gasoline	*3*	*7.5%*
Camp Fire	*3*	*757%*
Structure Fires	4	10.0%
Candle	*4*	*10.0*
Brush Fires	2	5.0%
Gasoline	*1*	*2.5%*
Brush Fire (Unspec.)	*1*	*2.5%*
House Fires	1	2.5%
Electrical	*1*	*2.5%*
MV Fires	1	2.5%
MVA	*1*	*2.5%*
Fires, Unspecified	1	2.5%
Electrical	*1*	*2.5%*
Scalds	**10**	**25.0%**
Cooking	6	15.0%
Cooking Liquids	*4*	*10.0%*
Food	*1*	*2.5%*
Cooking (Unspec.)	*1*	*2.5%*
Beverages	2	5.0%
Assault	1	2.5%
Hot Tap Water	1	2.5%
Explosion	**6**	**15.0%**
Aerosol Can	3	7.5%
Electrical	1	2.5%
Propane	1	2.5%
Explosion (Unspec.)	1	2.5%
Flame	**6**	**15.0%**
Ignitable Liquids	2	5.0%
Gasoline	*1*	*2.5%*
Ignitable Liquids	*1*	*2.5%*
Assault	1	2.5%
Cooking Liquids	1	2.5%
Flashburn	1	2.5%
Smoking (Unspec.)	1	2.5%
Contact	**1**	**2.5%**
Asphalt	1	2.5%
Electrical	**1**	**2.5%**
Electrocution	1	2.5%
Other	**1**	**2.5%**
Chemical	1	2.5%

JULY	**25**	**7.0%**
Cause	**# of Burns**	**% By Month**
Fire	**8**	**32.0%**
House Fires	4	16.0%
Explosion	*2*	*8.0%*
Smoking on Oxygen	*1*	*4.0%*
House Fire	*1*	*4.0%*
Camp or Bon Fires	3	12.0%
Aerosol Can	*1*	*4.0%*
Assault	*1*	*4.0%*
Gasoline	*1*	*4.0%*
MV Fires	1	4.0%
MVA	*1*	*4.0%*
Flame	**6**	**24.0%**
Ignitable Liquids	2	8.0%
Gasoline	*1*	*4.0%*
Ignitable Liquids	*1*	*4.0%*
Alcohol	1	4.0%
Barbeque (Gas)	1	4.0%
Propane	1	4.0%
Smoking (Unspec.)	1	4.0%
Scalds	**5**	**20.0%**
Cooking	3	12.0%
Beverages	2	8.0%
Explosion	**4**	**16.0%**
Gasoline	2	8.0%
Cooking (Unspec.)	1	4.0%
Heater	1	4.0%
Electrical	**1**	**8.0%**
Electrocution	1	4.0%
Metal	1	4.0%

AUGUST	**45**	**12.5%**
Cause	**# of Burns**	**% By Month**
Scalds	**22**	**48.9%**
Cooking	11	24.4%
Cooking Liquids	*10*	*22.2%*
Food	*2*	*2.2%*
Beverages	6	13.3**%**
Car Radiator	3	6.7%
Hot Tap Water	2	4.4%
Fire	**16**	**35.6%**
House Fires	10	22.2%
Gasoline	*6*	*13.3%*
Propane	*2*	*4.4%*
Smoking (Unspec.)	*1*	*2.2%*
House Fire (Unspec.)	*1*	*2.2%*
Brush Fires	2	4.4%
Gasoline	*1*	*2.2%*
Ignitable Liquids	*1*	*2.2%*
Structure Fires	2	4.4%
Cutting Torch	*2*	*2.2%*
Camp or Bonfires	1	2.2%
Camp Fire	*1*	*2.2%*
Fires, Unspecified	1	2.2%
Alcohol	*1*	*2.2%*
Flame	**5**	**11.1%**
Ignitable Liquids	2	4.2%
Gasoline	*1*	*2.2%*
Ignitable Liquids	*1*	*2.2%*
Alcohol	1	2.2%
Barbeque (Gas)	1	2.2%
Fireworks	1	2.2%
Contact	**2**	**4.4%**
Cooking (Unspec.)	1	2.2%
Lava	1	2.2%

1 Death

SEPTEMBER	**17**	**4.8%**
Cause	**# of Burns**	**% By Month**
Scalds	**11**	**64.7%**
Cooking Liquids	6	35.3%
Car Radiator	2	11.8%
Beverages	1	5.9%
Hot Tap Water	1	5.9%
Steam	1	5.9%
Fire	**2**	**11.8%**
House Fires	2	11.8%
Candle	*1*	*5.9%*
Smoking (Unspec.)	*1*	*5.9%*
Contact	**1**	**5.9%**
Metal	1	5.9%
Electrical	**1**	**5.9%**
Electrocution	1	5.9%
Explosion	**1**	**5.9%**
Boiler	1	5.9%
Flame	**1**	**5.9%**
Smoking on Oxygen	1	5.9%

OCTOBER	**20**	**5.6%**
Cause	**# of Burns**	**% By Month**
Scalds	**10**	**50.0%**
Cooking	6	30.0%
Food	*4*	*20.0%*
Cooking Liquids	*2*	*10.0%*
Car Radiator	2	10.0%
Beverages	1	5.0%
Hot Tap Water	1	5.0%
Fire	**4**	**20.0%**
MV Fires	3	15.0%
Car Fire	*1*	*5.0%*
Gasoline	*1*	*5.0%*
MVA	*1*	*5.0%*
House Fires	1	5.0%
House Fire (Unspec.)	*1*	*5.0%*
Electrical	**2**	**10.0%**
Electrocution	2	10.0%
Contact	**1**	**5.0%**
Contact (Unspec.)	1	5.0%
Flame	**1**	**5.0%**
Boiler	1	5.0%
Other	**2**	**10.0%**
Chemical	1	5.0%
Sunburn	1	5.0%

1 Death

NOVEMBER	**27**	**7.3%**
Cause	**# of Burns**	**% By Month**
Scalds	**13**	**48.1%**
Cooking	5	18.5%
Cooking Liquids	*2*	*7.4%*
Food	*2*	*7.4%*
Cooking (Unspec.)	*1*	*3.7%*
Beverages	3	11.1%
Hot Tap Water	3	11.1%
Assault	1	3.7%
Steam	1	3.7%
Fire	**8**	**29.6%**
House Fires	4	14.8%
House Fires	*2*	*7.4%*
Cooking Liquids	*1*	*3.7%*
Rescue	*1*	*3.7%*
Camp or Bon Fires	3	11.1%
Flammables	*1*	*3.7%*
Gasoline	*1*	*3.7%*
Bonfire	*1*	*3.7%*
Fires, Unspecified	1	3.7%
Gasoline	*1*	*3.7%*
Explosion	**2**	**7.4%**
Fireworks	2	7.4%
Contact	**1**	**3.7%**
Asphalt	1	3.7%
Electrical	**1**	**3.7%**
Flashburn	1	3.7%
Flame	**1**	**3.7%**
Welding	1	3.7%
Other	**1**	**3.7%**
Chemical	1	3.7%

DECEMBER	**37**	**10.4%**
Cause	**# of Burns**	**% By Month**
Flame	**13**	**35.1%**
Candle	3	8.1%
Cooking	2	5.4%
Cooking/Clothes	*1*	*2.7%*
Clothing (Unspec.)	*1*	*2.7%*
Heating Equipment	2	5.4%
Fireplace	*1*	*2.7%*
Heater (Unspec.)	*1*	*2.7%*
Smoking	2	5.4%
Smoking in Bed	*1*	*2.7%*
Smoking on Oxygen	*1*	*2.7%*
Assault	1	2.7%
Explosives	1	2.7%
Cutting Torch	1	2.7%
Unspecified	1	2.7%
Scalds	**9**	**24.3%**
Hot Tap Water	4	10.8%
Beverages	3	8.1%
Cooking	2	5.4%
Cooking Liquids	*1*	*2.7%*
Food	*1*	*2.7%*
Fire	**6**	**16.2%**
House Fires	3	8.1%
House Fire (Unspec.)	*2*	*5.4%*
Self-Immolation	*1*	*4.0%*
Camp or Bon Fires	2	5.4%
Clothes	*1*	*2.7%*
Gasoline	*1*	*2.7%*
MV Fires	1	2.7%
Fire Control	*1*	*2.7%*
Contact	**4**	**10.8%**
Heating Equipment	2	5.4%
Heater (Unspec.)	*1*	*2.7%*
Woodstove	*1*	*2.7%*
Heating Pad	1	2.7%
Wax	1	2.7%
Explosion	**2**	**5.4%**
Propane	2	5.4%
Electrical	**2**	**5.4%**
Electrocution	2	5.4%
Other	**1**	**2.7%**
Chemical	1	2.7%

Burn Injuries by Victim's Community

County	# of Burns
Barnstable	**19**
Barnstable	3
Bourne	3
Dennis	5
Falmouth	4
Harwich	1
Mashpee	1
Yarmouth	2
Berkshire	**4**
Cheshire	1
New Marlborough	1
Pittsfield	1
Stockbridge	1
Bristol	**34**
Attleboro	3
Dartmouth	2
Easton	2
Fairhaven	1
Fall River	8
New Bedford	11
North Attleboro	2
Somerset	1
Taunton	3
Westport	1
Dukes	**0**
Essex	**30**
Andover	2
Hamilton	1
Haverhill	1
Lawrence	5
Lynn	9
Lynnfield	1
Methuen	3
North Andover	2
Peabody	3
Rowley	1
Salisbury	1
Saugus	1

County	# of Burns
Franklin	**6**
Buckland	1
Greenfield	1
Montague	2
Northfield	1
Warwick	1
Hampden	**30**
Chicopee	3
Holyoke	1
Longmeadow	1
Ludlow	3
Southwick	1
Springfield	19
West Springfield	1
Wilbraham	1
Hampshire	**6**
Amherst	2
Chesterfield	1
Granby	1
Hatfield	1
South Hadley	1
Middlesex	**32**
Billerica	4
Boxborough	1
Burlington	1
Cambridge	1
Chelmsford	2
Everett	1
Holliston	1
Hopkinton	1
Lowell	3
Malden	1
Medford	2
Melrose	2
Natick	1
Newton	1
North Reading	1
Somerville	2
Stow	1
Townsend	1
Wakefield	2

County	# of Burns
Middlesex	**(con't)**
Waltham	2
Wayland	1
Nantucket	**0**
Norfolk	**32**
Braintree	4
Brookline	1
Canton	1
Cohasset	1
Dedham	2
Millis	2
Milton	2
Norwood	1
Quincy	8
Stoughton	1
Walpole	2
Weymouth	7
Plymouth	**27**
Abington	2
Brockton	12
Carver	2
Duxbury	1
Hanover	1
Kingston	1
Marion	1
Pembroke	2
Plymouth	4
Wareham	1

County	# of Burns
Suffolk	**32**
Boston	21
Chelsea	6
Revere	4
Winthrop	1
Worcester	**19**
Athol	3
Boylston	1
Dudley	1
Fitchburg	3
Grafton	1
Lancaster	1
Leominster	1
Millbury	1
Sterling	1
Sturbridge	1
Sutton	1
Webster	1
Worcester	3
Out of State	**87**